DSL Forum
Technical Report
TR-047

(Formerly WT-063v4)

DSL Service Flow-Through Fulfillment Management Interface

March 2002

Abstract:

This document identifies the data elements included in the information flows defined in TR-038. The information flows defined in TR-038 enable automation of the business-to-business interfaces between various operational entities involved in providing DSL service.

This document incorporates, references and uses certain field names, definitions and associated values from the *Local Service Ordering Guidelines (LSOG) Issue 5 (dated August 2000)*. The LSOG is developed and maintained by the Alliance for Telecommunications Industry Solutions (ATIS) sponsored Ordering and Billing Forum (OBF) through an industry issue resolution process. The field names, definitions and associated values incorporated into this DSL Forum document may be revised or updated in subsequent versions of the LSOG. The current version of the LSOG or other information regarding the document or the OBF may be found at: www.atis.org/atis/clc/obf/obfhom.htm, or obtained by calling 202-628-6380. The DSL Forum has received specific permission from ATIS to incorporate, reference and use the information from the LSOG.

Table of Contents

List of Tables

1. Introduction

TR-038 (Reference [1], page 187) recommends a normalized set of interactions that enable the automation of Service Fulfillment business processes between the operational entities which cooperate to provide the end-to-end DSL data services.

As described in TR-038, the prototypical DSL service supply chain consists of the following operational entities:

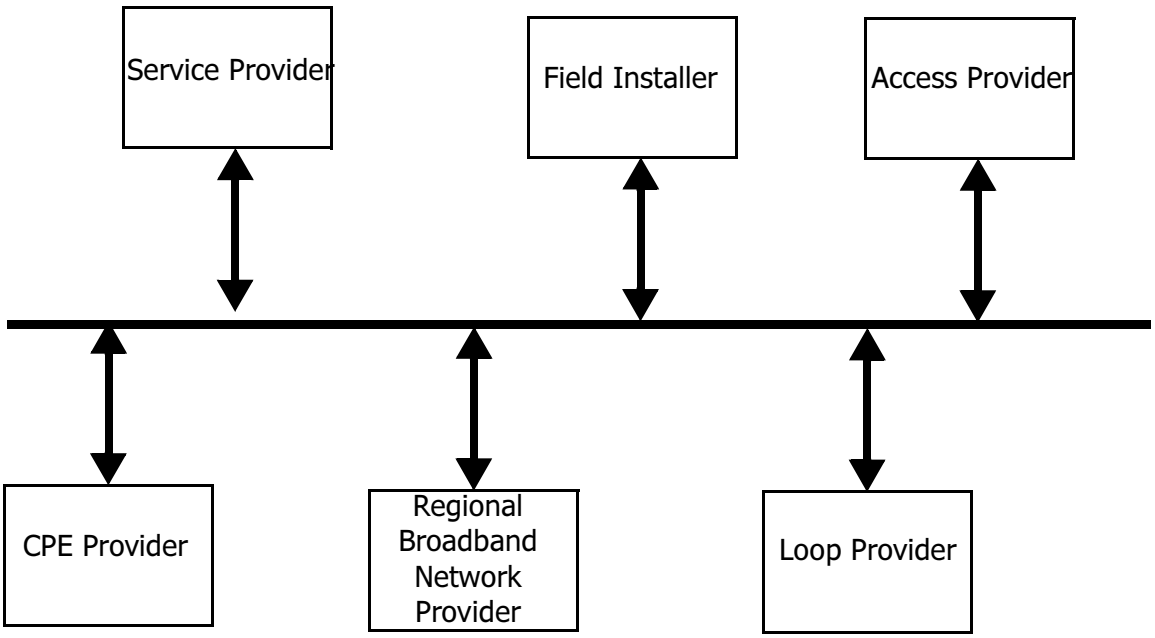


Figure 1: Generic DSL Service Supply Chain Interactions

The Loop Provider is the entity which:

- provides a metallic loop from the access network equipment to the customer's premises,
- is responsible for the integrity of the metallic loop and its repair.

The Access Provider is the entity which:

- provides digital connectivity to the customer,
- is responsible for the performance and repair of the access transmission equipment.

Traditionally the Access Provider is the entity that "owns" the DSLAM. An Access Provider may provide multiple simultaneous connections to multiple Regional Broadband Network Providers.

The Service Provider is the entity which:

- provides service to the end customer [i.e., End-User],
- is responsible for overall service assurance and, in particular, the aspects of service that are independent of the network between the server and the customer,
- may provide Customer Premise Equipment (CPE), or software to run on customer-owned CPE, to support a given service.

A Service Provider provides higher-layer application-level services such as voice, video, audio and/or basic Layer-3 access.

It is possible for a Service Provider to interact directly with an Access Provider in certain business process scenarios, such as Pre-Qualification of a loop.

The Regional Broadband Network (RBN) Provider is the entity which:

- provides appropriate connectivity between the Access Provider and the Service Provider
- is responsible for regional network performance and repair.

TR-025 (Reference [2], page 187) states that the RBN does the following functions:

- Provides service provisioning and backbone bandwidth allocation.
- May provide aggregation of PPP traffic.
- May provide signaling and service interworking.
- May provide proxy Authentication, Accounting, Addressing and Authorization.

The CPE Provider is the entity which supplies the customer premise equipment.

The Field Installer is the entity which performs the function of installing equipment and/or configuring equipment/software at the end user's premises. The Field Installer entity may be the end user customer performing self-install, or it may be auto-configuration performed via software. No attempt is made in this document to describe all possible scenarios. The document only addresses what information is necessary to complete the Field Installer functions.

Please refer to the diagram in TR-038 which illustrates the typical network architecture for supporting DSL service to an end-user's premises.

2. Scope

TR-038 presents a protocol-independent interaction model to enable standardized flow-through of end-to-end interactions for fulfillment of DSL service. Please note that only *data* services over DSL are addressed in TR-38, although it is expected that the model will support extension for support of voice, video, and other services over DSL as well.

This document extends the interaction model introduced in TR-038, by defining the data elements which comprise the request, response, and notification messages identified for each interaction in TR-038.

No attempt is made to define the structure of messages. As such, things like 'message header', message 'routing information', etc. are not included in this specification. Only the data elements necessary to carry the information needed to be exchanged between operational entities is included here.

A protocol dependent interaction model would define the message header, message structure, and message request/response protocol. Any protocol defined to support this model should also allow for the addition of trading partner specific data elements to all interactions.

2.1 Interaction Overview

The following figure illustrates the network layers, and the connectivity established between operational entities at these layers.

The lines represent connectivity established as a result of orders being processed in a flow-through manner.

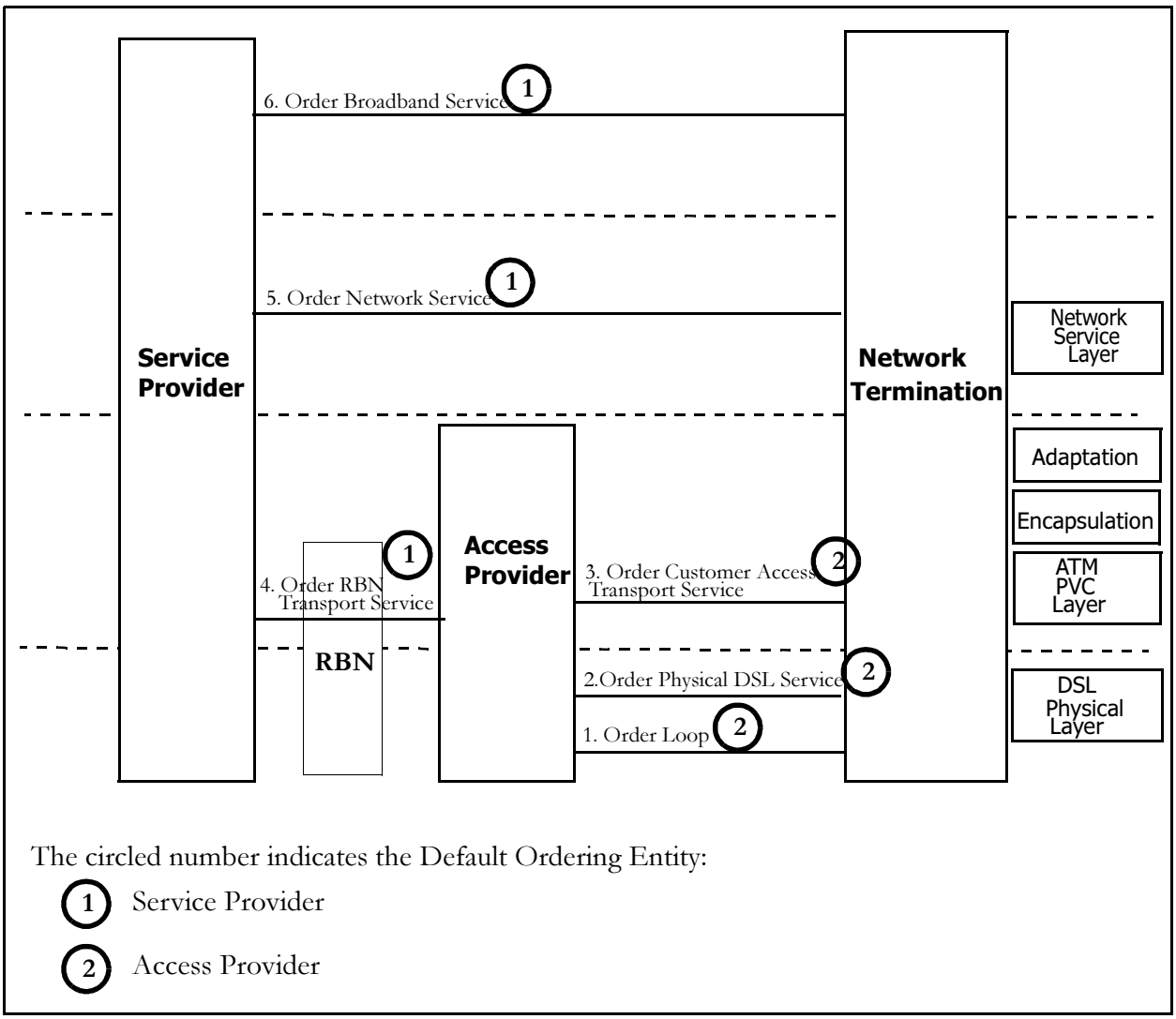


Figure 2: Default DSL Service Ordering Process Diagram

The operational entities exchange three types of messages:

- Request
- Response
- Notification

A Request message is sent from the requestor ordering entity to the responder ordering entity.

A Response message is sent by the responder ordering entity in response to a request from the requestor ordering entity.

A Notification message is sent by any ordering entity to notify another entity of a status change, a network change, a change in the services supported, etc. A Notification mes-

sage may or may not relate to an existing pending order.

As illustrated in Figure 2, interactions occur between operational entities in order to establish service at each Layer of the network.

2.1.1 Requests

There are four categories of activities for which a request is used: Prequalification, Preordering, Ordering, and Configuration Inquiry activities.

The Ordering activities involve two types of request: One request to place an order and one request to query about the status of a previously placed order.

A Configuration Inquiry is sent by one operational entity to inquire about the configuration at a particular network layer. This is not considered an order activity, and it is not associated with any in-progress order. This is used to obtain information about a configuration which is already established in the network.

- Prequalification Activity
- Preorder Activity
- Order Activity
  - Order Request
  - Status Request
- Configuration Inquiry Activity

2.1.2 Responses

The operational entity which is the target of the request; i.e., the responder operational entity, always returns a response. A Preorder request returns a Preorder response. A Prequalification request returns a Prequalification response. An Order request returns an Order response. A Status request returns a Status response. A Configuration Inquiry request returns a Configuration Inquiry response.

A response always identifies the *type* of response.

The Response Type is contained within the Response Identification. Refer to Table 6, "Response Identification," on page 11 for a complete description of the data elements contained in a Response Identification.

A Response also contains information about the results of processing the request by the responder. The results are characterized by:

1. Result Type
   - success
   - failure
   - error
2. Result Code (valid values are determined by looking at the Response Type and Result Type).
3. Success Attributes

2.1.3 Notifications

A notification is sent unsolicited from one operational entity to another. A notification is used:

- to convey information to the requestor about a previously placed order. This type of notification looks like a response. Normally the first message sent from responder to requestor is termed a response, whereas any subsequent 'responses' are termed notifications.
- to convey information from one operational entity to another, outside of any particular order. For instance to notify about new CPE equipment which is now supported by an operational entity, or to notify about a network reconfiguration that may affect the operational entity.

The following table attempts to capture the type of service information which is exchanged at the various network layers to establish an end-to-end service.

Service Information

Service Layer	Service Description	Information provided to describe service offering	Information provided to order service[a]	Service instance identifier (e.g. Circuit ID)[b]
Layer 4+ (Application Layer)	**Broadband Service** - Service Name	**Broadband Service Information**[c]: - Broadband Service - Provider ID - Promotional Code - Service Ready Date - Speed Information	Service Name **Broadband Service Configuration Information**: - Requested Service Start Date - Layer 4+ CPE Configuration Information - Requested Service Start Date - Service Duration - etc.	Broadband Service ID Provider ID
Layer 3	**Network Service** - Service Name	Network Service[d]	Service Name **Network Service Configuration Information**: - Layer 3 CPE Configuration Information	Network Service ID Provider ID
Layer 2	**Customer Access Transport Service** - Service Name - Upstream Speed - Downstream Speed - QOS	Customer Access Transport Service[e]	Service Name **Customer Access Transport Service Configuration Information**: -Layer 2 CPE Configuration Information	Customer Access Transport Service ID Provider ID
Layer 2	**RBN Transport Service** - Service Name	RBN Transport Service[f]	Service Name **RBN Transport Service Configuration Information**: - Uplink Bandwidth - Downlink Bandwidth - AP Virtual Circuit - SP Virtual Circuit - QOS - etc.	RBN Transport Service ID Provider ID
Layer 1	**Physical DSL Service** - Service Name	Physical DSL Service[g]	Service Name **Physical DSL Service Configuration Information**: - Central Office - Layer 1 CPE Configuration Information	Physical DSL Service ID Provider ID
Layer 1	**Loop Service** - NC, NCI, SECNCI	**Loop Service Information** [h]: - Loop Service - Line Sharing (Y/N)	Loop Service **Loop Service Configuration Information**: -	Loop Circuit ID (ECCKT) Provider ID

a. Configuration Information is what may be changed on a Service or on an Order (i.e., see request Tables in Section 4.1.6 "Change Service" and Section 4.1.4 "Modify Pending Order")
b. Returned in successful New Service Response (i.e., see response Tables in Section 4.1.3 "New Service"). Submitted in Change/Disconnect/Suspend/Resume Request (i.e., see request Tables in Section 4.1.6 "Change Service", Section 4.1.7 "Disconnect Service", Section 4.1.8 "Suspend Service", and Section 4.1.9 "Resume Service").
c. Returned in Table 58, "Determine DSL Capability Response"

d. Returned in Table 63, “Determine Available Network Service Response”
e. Returned in Table 65, “Determine Available Customer Access Transport Response”
f. Returned in Table 67, “Determine Available RBN Transport Service Response”
g. Returned in Table 69, “Determine Available Physical DSL Service Response”
h. Returned in Table 71, “Determine Available Loop Service Response”

The following table captures the type of information which is exchanged between Trading Partners to order CPE hardware.

CPE Information

Hardware	Description	Information provided to describe offering	Information provided to order hardware	Hardware instance identifier (e.g. Circuit ID)[a]
CPE (See “Broadband Network Termination (B-NT)” on page 187.)	CPE	CPE[b]	CPE **CPE Configuration Information**: - Layer 1 CPE Config Info - Layer 2 CPE Config Info - Layer 3 CPE Config Info - Layer 4+ CPE Config Info - Admin Authentication - Computer List	Serial Number Provider ID

a. Returned in Table 105, “Order CPE Response”. Submitted in Table 154, “Disconnect CPE Request”.
b. Returned in Table 73, “Determine Compatible CPE Response”

The following table captures the type of information which is exchanged between Trading Partners to schedule customer premise installation.

Installation Information

Appointment	Description	Information provided to describe offering	Information provided to schedule appointment	Appointment instance identifier (e.g. Circuit ID)[a]
Installation	n/a	n/a	Availability Information **CPE Configuration Information**	Appointment Date Provider ID

a. Returned in Table 110, “Order Installation Response”. Submitted in Table 156, “Disconnect Installation Request”.

2.2 Data Element Definition

Each data element is defined by the following parameters:

Field Name - The name of the data element.

Description - A textual description of the data element.

Data Type - The type of the value assigned to the data element. The possible data types are:

Simple data types:

alpha

alpha/numeric (no CR/LF - spaces, punctuation optional, depending on particular data element)

integer (unsigned numeric, no decimals)

decimal (may be signed, unless specified otherwise)

enumeration[1]

free-form text (can include CR/LF, spaces, punctuation, etc.)

boolean

Complex data types (built using Simple and/or other Complex data types):

1. Date
2. Time
3. Date and Time
4. Date and Time Range
5. Request Identification
6. Response Identification
7. Notification Identification
8. National Address
9. Free-Form Address
10. Telephone Number
11. Name
12. Free-Form Name
13. Parsed Name
14. E-Mail Address
15. National Central Office
16. CPE
17. National Loop Characteristics
18. Contact Information
19. Broadband Service
20. Network Service
21. Customer Access Transport Service
22. RBN Transport Service
23. Physical DSL Service
24. Loop Service
25. Service Address Information
26. Service Request Constraint
27. Building Access Information
28. Service Location Information
29. Timeslot

1. Within the context of this document, an enumeration type data element is a data element whose valid values are within a defined set of values. The initial list of valid values for enumeration type data elements is defined in "Data Model Management" on page 162 of this document

30. Availability Information
31. Virtual Circuit
32. Broadband Service Information
33. Loop Service Information
34. NIC Information
35. Broadband Service Configuration Information
36. Network Service Configuration Information
37. Customer Access Transport Service Configuration Information
38. RBN Transport Service Configuration Information
39. Physical DSL Service Configuration Information
40. Loop Service Configuration Information
41. CPE Configuration Information
42. Layer 1 CPE Configuration Information
43. Layer 2 CPE Configuration Information
44. Layer 3 CPE Configuration Information
45. Layer 4+ CPE Configuration Information
46. LAN Configuration Information
47. Provider Information
48. National ATUC Termination Information
49. Insurance Information
50. Contract Information
51. IP Address

The Complex Base Data Types are defined in "Complex Base Data Types" on page 9.

Data Characteristics - For alpha and alpha/numeric type data elements, this defines the minimum and maximum length of the value. For enumeration type data elements, this defines the literal valid values which the data element can assume. For each enumeration which is extensible (such as a list of valid country codes), the source responsible for maintaining the valid code set is cited.

Usage - Defines the conditions under which the data element is populated with a valid value in the message.

Required - the data element must be populated with a value. Where appropriate, it is stated which operational entity provides the value for the data element.

Optional - the data element may or may not be populated with a value. Optional fields may be required by individual providers.

Conditional - the usage of data element in a particular message is dependent on the relationship to another data element as specified in the usage notes. Usage of the data element is dependent on the presence, absence, value or combination of other data elements. Conditional fields may be required by individual providers.

Usage Notes - May be used to define the conditional usage rules for a data element.

3. Complex Base Data Types

These data structures are used by a number of process requests, responses, and/or notifications. Hence they are defined once and then used in the appropriate messages.

Table 1: Date

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Date**					
1.1	Year	A valid year	integer	4 characters	Required	
1.2	Month	A valid month	integer	2 characters (01-12)	Required	
1.3	Day	A valid day within the month	integer	2 characters (01-31)	Required	

Table 2: Time

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2	**Time**					
2.1	Hour	A valid hour	integer	2 characters (00-24)	Required	
2.2	Minute	A valid minute	integer	2 characters (00-60)	Required	
2.3	Second	A valid second value	integer	2 characters (00-60)	Required	
2.4	Time Zone	Time zone associated with time.	enumeration	Valid values are defined in Section 5.34	Required	

Table 3: Date and Time

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Date and Time**					
3.1	Date		Date	See Table 1:	Required	
3.2	Time		Time	See Table 2:	Optional	May be required, depending on the specific usage.

Table 4: Date and Time Range

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
4	**Date and Time Range**					
4.1	From Date and Time		Date and Time	See Table 3:	Required	
4.2	To Date and Time		Date and Time	See Table 3:	Required	

Table 5: Request Identification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
5	**Request Identification**	The Request Identification contains information used to identify a particular request, including the identity of the originator of the request.				
5.1	Request Type	The type of request	enumeration	Valid values are defined in Section 5.1.	Required	
5.2	Requestor ID	Identity of the requestor	Provider Information	See Table 47:.	Required	

Table 5: Request Identification (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
5.3	Requestor Affiliate ID	Identifies the sales or service affiliate of the requestor.	Provider Information	See Table 47:	Optional	For multi-tier relationshiprs. The value is assigned by the responder in advance.
5.4	Requestor Order ID	An identifier generated by the Requestor so that the response can be matched with it. It is assumed that the order IDs are chosen from a domain so that they are unique within a sufficiently long time interval. See also Response Identification	alpha/ numeric	1-16 characters	Required	
5.5	Requestor Version ID	Identifies the requestor's order version number.	alpha/ numeric	1-2 characters	Optional	
5.6	Request Timestamp	Date and time of the request generation, system generated	Date and Time	See Table 3:	Required	
5.7	Interface Version	It is possible that the operational entity which is the target of the request is running several versions of the interaction interfaces in parallel; versioning simplifies the processing of the request.	alpha/ numeric, allow period	1-6 chars	Optional	

Table 6: Response Identification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
6	**Response Identification**	The Response Identification contains information used to identify a particular response, including the identity of the originator of the response, and the target recipient of the response;i.e., the original requestor.				
6.1	Response Type	Identifies the type of response.	enumeration	Valid values are defined in Section 5.2.	Required	

Table 6: Response Identification (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
6.2	Responder ID	Identifies the sender of the response.	Provider Information	See Table 47:.	Required	
6.3	Responder Order ID	Identifies the associated order in the Responder's system.This is an order ID assigned by the service provider, used to identify the order for the life of the order. The Response Event ID identifies this particular response message, not the overall order.	alpha/ numeric	1-16 characters	Optional	
6.4	Response Event ID	Responder may generate their own event ID. It is assumed that the event IDs are chosen from a domain so that they are unique within a sufficiently long amount of time interval.	alpha/ numeric	1-16 chars.	Optional	
6.5	Requestor ID	Identifies the Requestor who is the target of this response.	Provider Information	See Table 47:.	Required	
6.6	Requestor Affiliate ID	Identifies the sales or service affiliate of the requestor.	Provider Information	See Table 47:.	Conditional	If a Requestor Affiliate ID was provided by the request, then it is returned in the response.
6.7	Requestor Order ID	This is the Requestor Order ID which was submitted by the Requestor in the original request.	alpha/ numeric	1-16 characters	Required	
6.8	Requestor Version ID	This is the Requestor Version ID which was submitted by the Requestor in the original request.	alpha/ numeric	1-2 characters	Conditional	If a Requestor Version ID was provided in the request, then it is returned in the response.

Table 6: Response Identification (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
6.9	Response Timestamp	This is the date and time the response was generated by the Responder's system.	Date and Time	See Table 3:	Required	
6.10	Interface Version	It is possible that the operational entity which is the generator of the response is running several versions of the interaction interfaces in parallel; versioning simplifies the processing of the response.	alpha/ numeric, allow period	1-6 chars	Optional	

Table 7: Notification Identification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
7	**Notification Identification**	The Notification Identification contains information used to identify a particular notification, including the identity of the originator of the notification.				
7.1	Notification Type	Identifies the type of notification.	enumeration	Valid values are defined in Section 5.3.	Required	
7.2	Notifier ID	Identifies the sender of the notification	Provider Information	See Table 47:.	Required	
7.3	Notifier Order ID	Identifies the associated order in the Notifier's system.	alpha/ numeric	1-16 chars.	Optional	
7.4	Notification Event ID	Notifier may generate their own event ID. It is assumed that the event IDs are chosen from a domain so that they are unique within a sufficiently long amount of time interval	alpha/ numeric	1-16 chars.	Optional	

Table 7: Notification Identification (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
7.5	Requestor ID	Identifies the original Requestor.	Provider Information	See Table 47:	Conditional	If the notification is associated with a previous request, then the Requestor ID is returned in the notification.
7.6	Requestor Affiliate ID	Identifies the sales or service affiliate of the original requestor.	Provider Information	See Table 47:	Conditional	If the notification is associated with a previous request, AND if a Requestor Affiliate ID was provided in the request, then it is returned in the notification.
7.7	Requestor Order ID	This is the Requestor Order ID which was submitted by the Requestor in the original request.	alpha/ numeric	1-16 chars.	Optional	If the notification is associated with a previous request, then the Requestor Order ID is returned in the notification.

Table 7: Notification Identification (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
7.8	Requestor Version ID	This is the Requestor Version ID which was submitted by the Requestor in the original request.	alpha/ numeric		Optional	If the notification is associated with a previous request, AND a Requestor Version ID was included in the request, then it is returned in the notification.
7.9	Notification Timestamp	The date and time the notification was generated by the Notifier.	Date and Time	See Table 3:		
7.10	Interface Version	Same intent as Interface Version in the Request Identification	alpha/ numeric, allow period	1-6 chars	Optional	

Table 8: National Address

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
8	**National Address**					
8.1	Address Format	Defines the format of the Address field.	enumeration	Valid values are defined in Section 5.35	Required	

Table 8: National Address (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
8.2	Address	An address. The format of the address is indicated by the Address Format field.	Parsed Address or Free-Form Address	See Table 9: for Free-Form Address. See Tables in Section A.1 for parsed address information on a per locale basis.	Required	

Table 9: Free-Form Address

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
9	**Free-Form Address**	A free-form street address is used to represent things like, billing address, central office address, address of the CPE provider, etc. The free-form address may also be used to represent the service address, although it is likely (at least in the U.S.) that the Parsed Address format is used to represent the service address.				
9.1	Address Line 1		alpha/ numeric, allow periods, hyphens and spaces	1-77 chars.	Required	
9.2	Address Line 2		alpha/ numeric, allow periods, hyphens and spaces	1-77 chars.	Optional	
9.3	Address Line 3		alpha/ numeric, allow periods, hyphens and spaces	1-77 chars.	Optional	

Table 9: Free-Form Address (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
9.4	City/Locality	Identifies the city, village, or township, etc.	alpha/ numeric, allow periods, hyphens and spaces	1-32 chars.	Required	
9.5	State/Province	Identifies the abbreviation for the state or province. See A.6.1 for reference to valid values on a national basis.	alpha	2-30 chars.	Conditional	Depends on the value for Country
9.6	Postal Code	Identifies the ZIP code, ZIP code + extension, or postal code. Required for North American addresses.	alpha/ numeric, allow hyphens, spaces	1-12 chars.	Conditional	Depends on the value for Country
9.7	Country	The two character standard country abbreviation	enumeration	Values are defined in Section 5.23.	Required	
9.8	Latitude	The latitude of the service address.	decimal	1-11 chars.	Optional	
9.9	Longitude	The longitude of the service address.	decimal	1-11 chars.	Optional	

Table 10: Telephone Number

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
10	**Telephone Number**	Based on the ITU-T E.164 standard definition for Geographic Area.				
10.1	Type	Identifies the type of telephone number.	alpha/ numeric	1-40 chars Example values are defined in Section 5.10.	Required	

Table 10: Telephone Number (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
10.2	Country Code		integer	1-3 chars	Optional for most DSL information flow-through needs	
10.3	National Destination Code	This is the Area Code in North American numbering plan, and City Code in European telephone number format	integer	1-5 chars	Required	
10.4	Subscriber Number	In the North American numbering plan, this is the 7 digit telephone number.	integer	1-7 chars	Required	
10.5	Extension	May be used to identify an extension number for a telephone number.	integer	1-7 chars	Optional	
10.6	PIN Number	May be used to identify a Pin number for a pager number.	integer	1-10 chars	Optional	

Table 11: Name

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
11	**Name**					
11.1	Person Name	Identifies the name of a person.	Free-Form Name or Parsed Name	See Table 12: See Table 13:	Conditional	Either Person Name or Organization Name is required
11.2	Organization Name	Identifies a company or organization name.	alpha/ numeric	1-30 chars	Conditional	Either Person Name or Organization Name is required

Table 11: Name (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
11.3	Department	When Organization Name is used, this field may be used to identify a particular department within the organization.	alpha/ numeric	1-20 chars	Optional	
11.4	Language Preference	Identifies language preference of the requestor.	alpha/ numeric	1-20 chars	Optional	

Table 12: Free-Form Name

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
12	**Free-Form Name**					
12.1	Person Name	Identifies the name of a person.	alpha/ numeric	1-30 chars	Required	

Table 13: Parsed Name

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
13	**Parsed Name**					
13.1	Title	Includes honorary salutations	alpha/ numeric, allow hyphens, spaces	1-15 chars	Optional	
13.2	First Name		alpha/ numeric	1-25 chars	Optional	
13.3	Middle Name or Initial		alpha/ numeric	1-15 chars	Optional	
13.4	Last Name	This is also referred to as 'Surname'.	alpha/ numeric	1-35 chars	Required	
13.5	Suffix	May be used to indicate "Jr." or "Ph.D.", etc.	alpha/ numeric, allow comma, period, spaces	1-15 chars	Optional	

Table 14: Email Address

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
14	**Email Address**	Either one of the following is a valid e-mail address: Userid@fully-qualified domain name (FQDN)Userid@fully-qualified-domain-name form x400 address form	alpha/ numeric	30 chars	Required	

Table 15: National Central Office

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
15	**National Central Office**					
15.1	Country Code	Defines the format for the Central Office data elements. A Central Office is defined differently depending on Country, Region, jurisdiction, etc.	enumeration	Values are defined in Section 5.23.	Required	
15.2	Central Office	A central office description. The format of the central office description is indicated by the Country Code	<ANY> Central Office	See Tables in Section A.2 for central office information on a per locale basis.	Required	

Table 16: CPE

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
16	**CPE**	This data element is used to identify either a type of CPE, or a particular instance of a CPE of that type (via inclusion of a Serial Number).				

Table 16: CPE (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
16.1	CPE Type	The type of customer premise equipment	alpha/ numeric	1-40 chars. Example values are defined in Section 5.11.	Required	
16.2	CPE Manufacturer	The manufacturer of the CPE	alpha/ numeric	1-40 char	Required	
16.3	CPE Model	The model of CPE	alpha/ numeric	1-40 char	Required	
16.4	Serial Number	The serial number of the CPE	alpha/ numeric	20 char	Optional	

Table 17: National Loop Characteristics

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
17	**National Loop Characteristics**					
17.1	Country Code	Defines the format of the Address field.	enumeration	Values are defined in Section 5.23.	Required	
17.2	Loop Characteristics	A set of characteristics of a loop. The data elements which characterize a loop differ amongst regions/ countries. The format of the loop characteristics is indicated by the Loop Characteristics Format field.	<Locale> Loop Characteristics	See Tables in Section A.3 for loop characteristic information on a per locale basis.	Required	

Table 18: Contact Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
18	**Contact Information**					

Table 18: Contact Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
18.1	Name	Name of contact person.	Name	See Table 11:		
18.2	Address	Address of contact person.	Free-Form Address	See Table 9:		
18.3	Contact Telephone List	List of telephone numbers for contact person.				
	Contact Telephone	Telephone number of contact person.	Telephone Number	See Table 10:	Optional	
18.4	Email Address	The email address of the contact person.	Email Address	See Table 14:	Optional	

Table 19: Broadband Service

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
19	**Broadband Service**					
19.1	Service Name	The name used by the service provider to identify the Broadband Service.	alpha/ numeric	1-40 chars, allow hyphens and spaces	Required	
19.2	Provider ID	Identifies the provider who is offering the service.	Provider Information	See Table 47:	Required	

Table 20: Network Service

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
20	**Network Service**					

Table 20: Network Service (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
20.1	Service Name	The name used by the service provider to identify the Network Service.	alpha/ numeric, allow hyphens and spaces	1-40 chars	Required	
20.2	Provider ID	Identifies the provider who is offering the service.	Provider Information	See Table 47:	Required	

Table 21: Customer Access Transport Service

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
21	**Customer Access Transport Service**					
21.1	Service Name	The name used by the service provider to identify the Customer Access Transport Service.	alpha/ numeric, allow hyphens and spaces	1-40 chars	Required	
21.2	Provider ID	Identifies the provider who is offering the service.	Provider Information	See Table 47:	Required	
21.3	Upstream Speed	Upstream speed in Kbps	integer	1-6 chars	Required	
21.4	Downstream Speed	Downstream speed in Kbps	integer	1-6 chars	Required	
21.5	QOS	Quality of Service indicator.	alpha/ numeric	1-40 chars.	Optional	
21.6	SCR	Sustained Cell Rate	alpha/ numeric	1-40 chars.	Optional	
21.7	PCR	Peak Cell Rate	alpha/ numeric	1-40 chars.	Optional	
21.8	MCR	Minimum Cell Rate	alpha/ numeric	1-40 chars.	Optional	
21.9	MBS	Maximum Burst Size, in number of cells.	integer	1-10 chars	Optional	
21.10	CDVT	Cell Delay Variation, in microseconds.	integer	1-10 chars	Optional	

Table 22: RBN Transport Service

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
22	**RBN Transport Service**					
22.1	Service Name	The name used by the service provider to identify the RBN Transport Service.	alpha/ numeric, allow hyphens and spaces	1-40 chars	Required	
22.2	Provider ID	Identifies the provider who is offering the service.	Provider Information	See Table 47:	Required	
22.3	Uplink Bandwidth	Bandwidth from Access Provider to Service Provider in KPBS.	integer	1-6 chars.	Required	
22.4	Downlink Bandwidth	Bandwidth from Service Provider to Access Provider in Kbps.	integer	1-6 chars	Required	
22.5	QOS	Quality of Service indicator.	alpha/ numeric	1-40 chars.	Optional	
22.6	SCR	Sustained Cell Rate	alpha/ numeric	1-40 chars.	Optional	
22.7	PCR	Peak Cell Rate	alpha/ numeric	1-40 chars.	Optional	
22.8	MCR	Minimum Cell Rate	alpha/ numeric	1-40 chars.	Optional	
22.9	MBS	Maximum Burst Size, in number of cells.	integer	1-10 chars	Optional	
22.10	CDVT	Cell Delay Variation, in microseconds.	integer	1-10 chars	Optional	

Table 23: Physical DSL Service

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
23	**Physical DSL Service**					

Table 23: Physical DSL Service (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
23.1	Service Name	The name used by the service provider to identify the Physical DSL Service.	alpha/ numeric, allow hyphens and spaces	1-40 chars	Required	
23.2	Provider ID	Identifies the provider who is offering the service.	Provider Information	See Table 47:	Required	

Table 24: National Loop Service

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
24	**National Loop Service**					
24.1	Country Code	Defines the format for the Central Office data elements. A Central Office is defined differently depending on Country, Region, jurisdiction, etc.	enumeration	Values are defined in Section 5.23.	Required	
24.2	Loop Service	A loop service description. The format of the loop service description is indicated by the Country Code	<ANY> Loop Service	See Tables in Section A.5 for loop service information on a per locale basis.	Required	
24.3	Provider ID	Identifies the provider who is offering the service.	Provider Information	See Table 47:	Required	

Table 25: Service Address Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
25	**Service Address Information**					

Table 25: Service Address Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
25.1	Service Address	Street address of service location.	National Address	See Table 8:	Conditional	One of Service Address, Working Telephone Number or Circuit ID is required.
25.2	Working Telephone Number	Number of working telephone at service address premise.	Telephone Number	See Table 10:	Conditional	One of Service Address, Working Telephone Number or Circuit ID is required.
25.3	Loop Circuit ID	Loop Circuit ID for service location.	alpha/ numeric	1-40 chars	Conditional	One of Service Address, Working Telephone Number or Loop Circuit ID is required.

Table 26: Service Request Constraint

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
26	**Service Request Constraint**	The intent of this is to model a constraints, e.g., existing CPE. Other constraints can be defined through an agreed upon list of constraint types				
26.1	Constraint Type		alpha/ numeric	1-40 chars. Example values are defined in Section 5.32.	Required	
26.2	Constraint Value		alpha/ numeric, allow hyphens and spaces	1-80 characters	Required	

Table 27: Building Access Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
27	**Building Access Information**					
27.1	Contact Information	Contact information for obtaining access to building.	Contact Information	See Table 18:	Required	
27.2	NID Location	Identifies location of the Network Interface Device at the building location.	alpha/ numeric	1-40 chars. Example values are defined in Section 5.29.	Required	

Table 28: Service Location Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
28	**Service Location Information**					
28.1	Service Address Information	Address for service location.	Service Address Information	See Table 25:	Required	
28.2	Building Access Information	Information about access to the service location.	Building Access Information	See Table 27:	Required	
28.3	Number Jacks	Indicates the number of telephone jacks at the end user premise. This may be used to determine how many splitters/filters to order.	integer	1-2 chars	Optional	

Table 29: Timeslot

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
29	**Timeslot**					
29.1	From Date		Date	See Table 1:	Optional	
29.2	To Date		Date	See Table 1:	Optional	
29.3	Day Of Week		enumeration	Valid values are defined in Section 5.15.	Required	
29.4	From Time		Time	See Table 2:	Optional	
29.5	To Time		Time	See Table 2:	Conditional	Required if From Time is present.

Table 30: Availability Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
30	**Availability Information**	The timeslots listed in Unavailable always override Preferred.				
30.1	Preferred Timeslot List	Requested customer timeslot(s).				
	Preferred Timeslot	Timeslots preferred by the customer.	Timeslot	See Table 29:	Required	
30.2	Unavailable Timeslot List	Timeslot(s) when customer is not available.				
	Unavailable Timeslot	Timeslots when the customer is not available.	Timeslot	See Table 29:	Optional	

Table 31: Virtual Circuit

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
31	**Virtual Circuit**					
31.1	VC Type	Virtual circuit type.	enumeration	Valid values are defined in Section 5.16.	Required	
31.2	VPI	Virtual Path Indicator	integer	4 characters	Conditional	Either (VPI and VCI) or DLCI is required
31.3	VCI	Virtual Circuit Indicator	integer	5 characters	Conditional	Either (VPI and VCI) or DLCI is required
31.4	DLCI	Dedicated Location Circuit Information	integer	0-1023	Conditional	Either (VPI and VCI) or DLCI is required

Table 32: Broadband Service Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
32	**Broadband Service Information**					
32.1	Service	Identifies a Broadband Service offering.	Broadband Service	See Table 19:	Required	
32.2	Promotional Code	A service provider's promotional code associated with the service offering.	alpha/ numeric, allow hyphens and spaces	1-40 chars	Optional	

Table 32: Broadband Service Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
32.3	Contract Information	Information provided about the term and cost of the service.	Contract Information	See Table 50:	Optional	Normally, returned in response to a service availability query. Not normally provided in the request when service is being ordered.
32.4	Minimum Speed Upstream	Service speed information. In Kbps.	integer	1-6 chars	Optional	
32.5	Maximum Speed Upstream	Service speed information. In Kbps.	integer	1-6 chars	Optional	
32.6	Minimum Speed Downstream	Service speed information. In Kbps.	integer	1-6 chars	Optional	
32.7	Maximum Speed Downstream	Service speed information. In Kbps.	integer	1-6 chars	Optional	
32.8	Service Ready Date	In not provided, ready now	Date	See Table 1:	Optional	
32.9	Accepting Orders Date	If not provided, accepting orders now	Date	See Table 1:	Optional	

Table 33: Loop Service Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
33	**Loop Service Information**					
33.1	Service	Identifies a particular loop service offering.	Loop Service	See Table 24:	Required	
33.2	Line Sharing	Indicates whether line sharing is available for the service.	boolean		Required	

Table 34: NIC Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
34	**NIC Information**	Network Interface Card information.				
34.1	Card Type	Type of network interface card.	enumeration	Valid values are defined in Section 5.18	Required	
34.2	Bus Type	Identifies the type of PC or gateway bus.	enumeration	Valid values are defined in Section 5.17.	Required	
34.3	MAC Address	Address of medium access control unit.	alpha/ numeric	12 chars	Required	
34.4	Manufacturer	The manufacturer of the NIC	alpha/ numeric, allow hyphens, commas, periods, spaces	1-40 chars	Required	
34.5	Model	The manufacturer's model of the NIC	alpha/ numeric allow hyphens, periods and spaces	1-40 chars	Required	
34.6	Transmission Speed	The maximum transmission speed possible in Kbps	integer	1-6 chars	Required	

Table 35: Broadband Service Configuration Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
35	**Broadband Service Configuration Information**					

Table 35: Broadband Service Configuration Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
35.1	Minimum Acceptable Download Speed	Minimum download speed identified by requestor for customer, in Kbps.	integer	1-6 chars	Optional	For when requested service is unfulfillable; e.g., automatic Change Order downgrade authorization.
35.2	Minimum Acceptable Upload Speed	Minimum upload speed identified by requestor for customer, in kbps.	integer	1-6 char	Optional	For when requested service is unfulfillable; e.g., automatic Change Order downgrade authorization.
35.3	Service Provider Virtual Circuit	Identifies the virtual circuit at the service provider end.	Virtual Circuit	See Table 31:	Optional	Usage is based on business relationship
35.4	Requested Service Start Date	Date when end user customer desires service to be up and available.	Date	See Table 1:	Optional	Usage is based on business relationship.
35.5	Installer ID	Identifies the provider who is expected to arrange for installation of CPE at the end-user's premise.	Provider Information	See Table 47:	Conditional	Only required if this is not a self-install.
35.6	CPE Provider ID	Identifies the provider who is expected to provide the CPE to the end user.	Provider Information	See Table 47:	Required	
35.7	CPE Configurer ID	Identifies the provider who is expected to configure the CPE at the Application Layer for the end user.	Provider Information	See Table 47:	Conditional	May be auto-configuration, in which case this data element is not applicable.

Table 35: Broadband Service Configuration Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
35.8	Layer 4+ CPE Configuration Information	Information necessary to configure the CPE for this layer.	Layer 4+ CPE Configuration Information	See Table 45:	Required	

Table 36: Network Service Configuration Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
36	**Network Service Configuration Information**					
36.1	CPE Configurer ID	Identifies the provider who is expected to configure the CPE at Layer3 for the end user.	Provider Information	See Table 47:	Conditional	May be auto-configuration, in which case this data element is not applicable.
36.2	Layer 3 CPE Configuration Information	Information necessary to configure the CPE for this layer.	Layer 3 CPE Configuration Information	See Table 44:	Required	
36.3	Access Protocol	The type of access protocol for the service.	enumeration	Valid values are defined in Section 5.40	Required	
36.4	FCS	Indicates whether FCS is used.	boolean		Conditioal	Applicable if Access Protocol=Ethernet, IPoE, PPPoE
36.5	Requested Service Start Date	Date when requestor desires service to be up and available.	Date	See Table 1:	Optional	Usage is based on business relationship.

Table 37: Customer Access Transport Service Configuration Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
37	**Customer Access Transport Service Configuration Information**					
37.1	CPE Configurer ID	Identifies the provider who is expected to configure the CPE at Layer 2 for the end user.	Provider Information	See Table 47:	Conditional	May be auto-configuration, in which case this data element is not applicable.
37.2	Layer 2 CPE Configuration Information	Information necessary to configure the CPE for this layer.	Layer 2 CPE Configuration Information	See Table 43:	Required	
37.3	Requested Service Start Date	Date when requestor desires service to be up and available.	Date	See Table 1:	Optional	Usage is based on business relationship.

Table 38: RBN Transport Service Configuration Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
38	**RBN Transport Service Configuration Information**					
38.1	Protocol Configuration	Information necessary to configure the service, based on what protocol is being used.		See Tables in Section B.1 for configuration information on a per protocol basis.	Required	

Table 38: RBN Transport Service Configuration Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
38.2	Requested Service Start Date	Date when requestor desires service to be up and available.	Date	See Table 1:	Optional	Usage is based on business relationship.
38.3	Service Level Agreement	Defines the guaranteed level of service.	free-form text	1-150 chars	Optional	

Table 39: Physical DSL Service Configuration Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
39	**Physical DSL Service Configuration Information**					
39.1	Central Office		National Central Office	See Table 15: Also, see Tables in Section A.2 for central office information on a per locale basis.	Required	
39.2	Service Level Agreement	Defines the guaranteed level of service.	free-form text	1-150 chars	Optional	
39.3	Conditioning Level	The level of conditioning provided by the service provider.	alpha/ numeric, allow hyphens and spaces	1-40 chars	Optional	
39.4	CPE Configurer ID	Identifies the provider who is expected to configure the CPE at Layer 1 for the end user.	Provider Information	See Table 47:	Conditional	May be auto-configuration, in which case this data element is not applicable.

Table 39: Physical DSL Service Configuration Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
39.5	Layer 1 CPE Configuration Information	Information necessary to configure the CPE for this layer.	Layer 1 CPE Configuration Information	See Table 42:	Required	
39.6	Requested Service Start Date	Date when requestor desires service to be up and available.	Date	See Table 1:	Optional	Usage is based on business relationship.

Table 40: Loop Service Configuration Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
40	**Loop Service Configuration Information**					
40.1	Ordering Code List	A list of ordering codes (universal service ordering codes - USOCs - for example) defining configuration of the service.				
40.2	Ordering Code	An ordering code identifying a loop feature.	alpha/ numeric	1-40 chars	Required	
40.3	Line Sharing Requested	An indicator of whether the orderer desires line sharing.	boolean		Required	
40.4	Requested Service Start Date	Date when requestor desires service to be up and available.	Date	See Table 1:	Optional	Usage is based on business relationship.

Table 41: CPE Configuration Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
41	**CPE Configuration Information**	Information required to order and install CPE for broadband access.				

Table 41: CPE Configuration Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
41.1	Layer 1 CPE Configuration	Information to configure layer 1 parameters for the CPE.	Layer 1 CPE Configuration Information	See Table 42:	Required	
41.2	Layer 2 CPE Configuration	Information to configure layer 2 parameters for the CPE.	Layer 2 CPE Configuration Information	See Table 43:	Required	
41.3	Layer 3 CPE Configuration	Information to configure layer 3 parameters for the CPE.	Layer 3 CPE Configuration Information	See Table 44:	Required	
41.4	Layer 4+ CPE Configuration	Information to configure layer 4 parameters for the CPE.	Layer 4+ CPE Configuration Information	See Table 45:	Required	
41.5	Admin Authentication	The management access code (e.g. admin password) for the above CPE.	alpha/ numeric, allow special characters, but not spaces	1-40 chars.	Optional	
41.6	Computer List	For each machine connected to the CPE, the following set of information is provided.				
41.7	OS Type	The OS Type of the machine which is connected to the CPE.	enumeration	Valid values are defined in Section 5.26.	Required	
41.8	Bus Type	Identifies the type of bus.	enumeration	Valid values are defined in Section 5.17.	Optional	
41.9	Network Port Type	Identifies the type of network port.	enumeration	Valid values are defined in Section 5.18.	Required	

Table 41: CPE Configuration Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
41.10	OS License Type	Identifies the type of OS license.	alpha/ numeric	1-40 chars. Example values are defined in Section 5.27.	Optional	
41.11	Computer Type	The type of machine connected to the CPE. Although there are some scenarios where the CPE is "hosted" by a PC (e.g., B-NT on a PCI card or chip set on motherboard), typically the CPE (B-NT or B-NT/gateway/IAD) is not "hosted" by a PC; it is an external device.	enumeration	Valid values are defined in Section 5.28.	Optional	
41.12	NIC Information	Optional information about Network Interface Card and configuration.	NIC Information	See Table 34:	Optional	

Table 42: Layer 1 CPE Configuration Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
42	**Layer 1 CPE Configuration Information**					
42.1	Service Type	This identifies the type of broadband service to be carried via the CPE.	alpha/ numeric	1-40 chars	Optional	
42.2	ADSL Config Profile	Data elements which comprise the ADSL Line MIB are defined in RFC2662. Only data elements from the following profile tables are required for Layer 1 CPE Configuration: adslLineConfProfileTable adslLineAlarmConfProfile-Table	ADSL Line MIB	See Section 6. ”Glossary and References” [6]	Conditional	Depends on type of service being configured.

Table 42: Layer 1 CPE Configuration Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
42.3	Loop Circuit ID	Loop Circuit ID for service location.	alpha/ numeric	1-40 chars	Conditional	Depends on type of service being configured.
42.4	Name	End-user name	Name	See Table 11:	Conditional	Depends on type of service being configured.
42.5	Service Address	End-user service address for location of broadband service termination. Customer premise address.	National Address	See Table 8:	Conditional	Depends on type of service being configured.

Table 43: Layer 2 CPE Configuration Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
43	**Layer 2 CPE Configuration Information**					
43.1	Service Type	This identifies the type of broadband service to be carried via the CPE.	alpha/ numeric	1-40 chars	Optional	
43.2	Encapsulation List	A list of the types of encapsulation configured at the CPE.				
43.3	Encapsulation		enumeration	Valid values are defined in Section 5.37.	Conditional	Depends on type of service being configured.
43.4	Virtual Circuit	Identifies the Virtual Circuit	Virtual Circuit	See Table 31:	Conditional	Depends on type of service being configured.
43.5	Service Name	Identifies the Physical DSL Service being configured to the CPE.	alpha/ numeric, allow hyphens and spaces	1-40 chars	Conditional	Depends on type of service being configured.

Table 43: Layer 2 CPE Configuration Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
43.6	Protocol Configuration	Information necessary to configure the CPE, based on what protocol is being used.		See Tables in Section B.2 for configuration information on a per protocol basis.	Required	
43.7	Bridging Protocol	Network parameters are defined in fb-nm-0165.000		See Section 6. "Glossary and References" [15]	Conditional	Depends on type of service being configured.
43.8	Client Protocol List	A list of the types of protocol used across the 2.5 layer.				
43.9	Client Protocol		enumeration	Valid values are defined in Section 5.39	Required	

Table 44: Layer 3 CPE Configuration Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
44	**Layer 3 CPE Configuration Information**					
44.1	Service Type	This identifies the type of broadband service to be carried via the CPE.	alpha/ numeric	1-40 chars	Optional	
44.2	IP Assignment	Identifies the local IP address of the CPE.	IP Address	See Table 51:	Conditional	Required if Routing Type is static.
44.3	Subnet Mask	Identifies the subnet mask.	IP Address	See Table 51:	Conditional	Required if Routing Type=Static

Table 44: Layer 3 CPE Configuration Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
44.4	Routing Type	Defines whether the CPE is configured for static or dynamic routing.	enumeration	Valid values are defined in Section 5.19	Required	
44.5	Routing Protocol	Identifies the routing protocol of the CPE. See Section 6. "Glossary and References" [10] for RIP-2 definition. See Section 6. "Glossary and References" [11] for OSPF definition.	enumeration	Valid values are defined in Section 5.20.	Required	
44.6	CPE IP Range	A range of public IP addresses assigned to the CPE.	IP Address-IP Address	See Table 51:	Conditional	Required if Routing Type=Static
44.7	Gateway IP	Identifies the public IP address of the gateway.	IP Address	See Table 51:	Conditional	Required if Routing Type=Static
44.8	Networking Type	Identifies the type of networking supported by the CPE.	enumeration	Valid values are defined in Section 5.33	Required	
44.9	LAN Configuration	This configuration refers to the end user-side LAN configuration only.	LAN Configuration Information	See Table 46:	Conditional	Required if Networking Type=IP or IP with NAT

Table 45: Layer 4+ CPE Configuration Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
45	**Layer 4+ CPE Configuration Information**					
45.1	Service Type	This identifies the type of broadband service to be carried via the CPE.	alpha/ numeric	1-40 chars	Optional	

Table 45: Layer 4+ CPE Configuration Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
45.2	Primary Nameserver Address	Identifies the Primary DNS Server IP address.	IP Address	See Table 51:	Conditional	Required if Routing Type=Static.
45.3	Secondary Nameserver Address	Identifies the secondary DNS Server IP address.	IP Address	See Table 51:	Optional	Only applies if Routing Type=Static.
45.4	Domain Name	Identifies the domain name.	alpha/ numeric	1-40 chars.	Optional	
45.5	Services List	A list of internet service locations reachable from the CPE. Each service is identified via a Service Type and Service Address field.				
45.6	Service		Internet Service	See Table 52:	Required	
45.7	Firewall Rules List	Information about configuration of firewall for security purposes. A list of external to internal IP address and port mappings. Also referred to as 'Port Forwarding List'				
45.8	Allow	Defines whether packets of the below protocol are allowed or denied to pass from the source address to the destination address.	boolean		Required	
45.9	Packet Protocol	Identifies a packet of a particular protocol.	alpha/ numeric	1-40 chars. Example values are defined in Section 5.41	Conditional	One of Packet Protocol, Source IP Address or Source URI is required
45.10	Source IP Address	Source IP address from which packets of the above type are routed.	IP Address	See Table 51:	Conditional	One of Packet Protocol, Source IP Address or Source URI is required
45.11	Source Port	Source port number	integer	1-6 chars	Conditional	Optional if Source IP Address is present
45.12	Destination IP Address	Destination IP address for routing of packets from the above source address.	IP Address	See Table 51:	Optional	

Table 45: Layer 4+ CPE Configuration Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
45.13	Destination Port	Destination port number	integer	1-6 chars	Conditional	Optional if Destination IP Address is present
45.14	Source URI	Identifies a source URL.	alpha/ numeric, allow colon, forward slashes, periods	1-255 chars	Conditional	One of Packet Protocol, Source IP Address or Source URI is required
45.15	Action	An optional action to perform each time a packet of the above protocol is routed to the destination address.	alpha/ numeric	1-40 chars. Example values are defined in Section 5.42	Optional	

Table 46: LAN Configuration Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
46	**LAN Configuration Information**					
46.1	Subnet Mask	Identifies the subnet mask.	IP Address	See Table 51:	Required	
46.2	CPE IP Range	A range of IP addresses assigned to the CPE.	IP Address-IP Address	See Table 51:	Required	
46.3	Max Leases	Maximum number of simultaneous leases.	integer	1-255	Required	
46.4	Lease Time	Length of lease in seconds. Typically the Lease Time would be set at 1 or 3 days (i.e., 86400 or 259200 seconds), but each service provider is free to set their own value.	integer	0-10**32	Required	

Table 47: Provider Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
47	**Provider Information**					
47.1	Provider Type	Identifies the type of provider.	enumeration	Valid values are defined in Section 5.22.	Required	
47.2	Provider ID Code Type	Identifies the code set used to identify this trading partner.	enumeration	Valid values are defined in Section 5.36.	Required	
47.3	Provider ID Code	The trading partner identifier	alpha/ numeric	1-40 chars	Conditional	Required if Provider ID Code Type does not equal 'Customer' (end user customer does not have a provider ID code)

Table 48: National ATUC Termination Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
48	**National ATUC Termination Information**					
48.1	Country Code	Defines the format of the Address field.	enumeration	Valid values are defined in Section 5.23	Required	

Table 48: National ATUC Termination Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
48.2	ATUC Termination Information	Describes an ATUC Termination. The format is indicated by the ATUC Termination Information Format field.	ATUC Termination Information	See Tables in Section A.4 for ATUC termination information on a per locale basis.	Required	
48.3	Address	An address. The format of the address is indicated by the Address Format field.	Parsed Address or Free-Form Address	See Table 9: for Free-Form Address. See Tables in Section A.1 for parsed address information on a per locale basis.	Required	

Table 49: Insurance Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
49	**Insurance Information**					
49.1	Proof Required	Indicates whether the service provider needs to provide proof of insurance.	boolean		Required	
49.2	Fax Number	Number to which proof of insurance should be faxed.	Telephone Number	See Table 10:	Conditional	Required if Proof Required=Y

Table 50: Contract Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
50	**Contract Information**					
50.1	Term Length	Time frame of the service provided to the end user, in months.	integer	0-3 chars	Required	
50.2	Cost Unit	Identifies the type of currency reflected in the value of the Cost elements.	enumeration	Valid values are defined in Section 5.31.	Required	
50.3	Recurring Cost	Amount of the recurring cost of service.	decimal, non-negative		Required	
50.4	Recurring Basis	Identifies the type of basis of recurring cost.	enumeration	Valid values are defined in Section 5.45.		
50.5	Installation Cost	Identifies the one-time installation cost for the service.	decimal, non-negative	1-7 chars	Required	
50.6	Equipment Cost	Identifies the one-time or term equipment cost for the service.	decimal, non-negative	1-7 chars	Required	
50.7	Processing Cost	Amount of the one-time processing charge for the service.	decimal, non-negative	1-7 chars	Required	

Table 51: IP Address

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
	IP Address	A textual representation of either an IPv4 or IPv6 address as defined by RFC2373. The format is expressed as x:x:x:x:x:x:d.d.d.d, where the 'x's are the hexadecimal values of the six high-order 16-bit pieces of the address, and the 'd's are the decimal values of the four low-order 8-bit pieces of the address (standard IPv4 representation). RFC2373 allows successive zeros in the hexadecimal 16-bit pieces to be expressed simply as double colons (::). Three examples are: ::4.5.6.7 ::FFFF:129.144.52.38 FEDC:BA98:7654:3210:FEDC:BA98:210.184.233.104				

Table 51: IP Address (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
51	**IP Address**		alpha/ numeric, colons and periods allowed (Format defined in RFC2373)	9-45 chars	Required	

Table 52: Internet Service

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
52	**Internet Service**					
52.1	Internet Service Type	The type of internet service.	alpha/ numeric	1-40 chars. Example values are defined in Section 5.38.	Required	
52.2	Internet Service URI	Identifies the URL for the service location.	alpha/ numeric, allow colon, forward slashes, periods	1-255 chars	Required	

4. Interaction Data Elements

4.1 Service Fulfillment

4.1.1 Pre-Order

4.1.1.1 Validate DSL Service Location

4.1.1.1.1 Validate DSL Service Location Request

Table 53: Validate DSL Service Location Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Service Address Information**	Address of the service location.	Service Address Information	See Table 25:	Required	

4.1.1.1.2 Validate DSL Service Location Response

Table 54: Validate DSL Service Location Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Service Location Result Code	Defines the result of the service location validation.	alpha/ numeric	1-40 chars Example values are defined in Section 5.5.	Required	
3	**Service Address List**	Depending on the Service Location Result Code, there may be none, one, or more than one service address returned in the response.				
3.1	Service Address	Address for service location.	National Address	See Table 8:	Required	

4.1.1.2 Determine Loop Provider

4.1.1.2.1 Determine Loop Provider Request

Table 55: Determine Loop Provider Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Service Address Information**	Information about the service location.	Service Address Information	See Table 25:	Required	

4.1.1.2.2 Determine Loop Provider Response

Table 56: Determine Loop Provider Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Loop Provider Result Code	Defines the result of the loop provider inquiry.	alpha/ numeric	1-40 chars. Example values are defined in Section 5.6.	Required	
3	**Loop Provider Identification**	Identifies the loop provider for the service location address in the request.	Provider Information	See Table 47:	Required	
4	**Central Office**	Identifies the central office from which the loop is serviced.	National Central Office	See Table 15: Also, see Tables in Section A.2 for central office information on a per locale basis.	Required	
5	**Service Address Information**	If provided in the request, may be returned in the response.	Service Address Information	See Table 25:	Optional	

4.1.2 Prequalification

4.1.2.1 Determine DSL Capability

4.1.2.1.1 Determine DSL Capability Request

This can determine DSL capability at a service location, where service location can be a specific service address, a range of addresses (identified via a CO, or remote terminal - all

addresses homing on that location would be validated), or a geographic region. Service location can also be identified via a Working Telephone Number.

Table 57: Determine DSL Capability Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Service Address Information**	Address for service location.	Service Address Information	See Table 25:	Required	
3	**Service Request Constraint List**	List of constraint types and values.				
3.1	Service Request Constraint		Service Request Constraint	See Table 26:	Optional	

4.1.2.1.2 Determine DSL Capability Response

Table 58: Determine DSL Capability Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Prequalification Result Code	Defines the result of the DSL capability inquiry.	alpha/ numeric	1-40 chars. Example values are defined in Section 5.7.	Required	
3	**Service Address List**					

Table 58: Determine DSL Capability Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3.1	Service Address		National Address	See Table 8:	Optional	Based on Prequalification Result Code - especially for multiple addresses found.
4	**Prequalification Timestamp**	The date and time when the prequalification was made.	Date and Time	See Table 3:	Optional	
5	**Prequalification Expiration**	Identifies how long the prequalification result is applicable.	Date and Time	See Table 3:	Optional	May be covered by business rules
6	**Prequalification Information**	Reference ID or other prequalification result code. Supplied back to provider when ordering broadband service.				
6.1	Prequalification Reference ID	Used to link this prequalification to a subsequent order for service.	alpha/ numeric, allow hyphens	1-40 chars	Optional	Used by RBOCs and possibly others.
6.2	Qualified Address	Service address being qualified.	National Address	See Table 8:	Optional	
6.3	Qualified Telephone Number	Service telephone number being qualified.	Telephone Number	See Table 10:	Optional	
6.4	Qualified Loop Circuit ID	Service location circuit id being qualified.	alpha/ numeric	1-40 chars	Optional	
6.5	Central Office	Identity of the central office from which the above loop circuit is serviced.	National Central Office	See Table 15: Also, see Tables in Section A.2 for central office information on a per locale basis.	Optional	
6.6	Loop Characteristics	The loop characteristics, including the distance from the service address to the serving central office.	National Loop Characteristics	See Table 17:	Optional	

Table 58: Determine DSL Capability Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
6.7	CO Capacity Constraint	Limitations determined by CO qualification.	alpha/ numeric	1-40 chars. Example values are defined in Section 5.43	Optional	
7	**Service Information List**	It is understood that the April 7 FCC mandate does not require that available service speeds be provided as part of the pre-qualification response.				
7.1	Service Information		Broadband Service Information	See Table 32:	Optional	

4.1.2.1.3 Determine DSL Capability Notification

Table 59: Determine DSL Capability Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	
2	**Central Office List**					
2.1	Central Office	A central office at which service is now available, or for which the list of available services has changed.	National Central Office	See Table 15: Also, see Tables in Section A.2 for central office information on a per locale basis.	Required	

4.1.2.2 Determine RBN Connectivity

4.1.2.2.1 Determine RBN Connectivity Request

Table 60: Determine RBN Connectivity Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Central Office**	Identifies the central office from which RBN connectivity is requested.	National Central Office	See Table 15: Also, see Tables in Section A.2 for central office information on a per locale basis.	Required	

4.1.2.2.2 Determine RBN Connectivity Response

Table 61: Determine RBN Connectivity Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Prequalification Result Code	Defines the result of the RBN connectivity inquiry.	alpha/ numeric	1-40 chars. Example values are defined in Section 5.7.	Required	

Table 61: Determine RBN Connectivity Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**RBN Transport Service ID List**	Identifies the circuits which provide RBN connectivity from the input Central Office to the requestor's network.				
3.1	RBN Transport Service ID		alpha/ numeric	1-40 chars	Required	

4.1.2.3 Determine Available Broadband Service

This is an internal Service Provider interaction, hence it is not modeled.

4.1.2.4 Determine Available Network Service

4.1.2.4.1 Determine Available Network Service Request

Table 62: Determine Available Network Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Service Address**	The address of the service location.	Free-Form Address	See Table 9:	Required	
3	**Service Request Constraint List**	List of constraint types and values.				
3.1	Service Request Constraint		Service Request Constraint	See Table 26:	Optional	

4.1.2.4.2 Determine Available Network Service Response

Table 63: Determine Available Network Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					

Table 63: Determine Available Network Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.		
2.2	Prequalification Result Code	Defines the result of the available Network Service inquiry.	alpha/ numeric	1-40 chars Example values are defined in Section 5.7.		
3	**Network Service List**	Identifies network services offered by a service provider.				
3.1	Network Service		Network Service	See Table 20:	Optional	

4.1.2.5 Determine Available Customer Access Transport Service

4.1.2.5.1 Determine Available Customer Access Transport Request

Table 64: Determine Available Customer Access Transport Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Service Address**	Address of the service location.	Free-Form Address	See Table 9:	Required	
3	**Service Request Constraint List**	List of constraint types and values.				
3.1	Service Request Constraint		Service Request Constraint	See Table 26:	Optional	

4.1.2.5.2 Determine Available Customer Access Transport Response

Table 65: Determine Available Customer Access Transport Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.		
2.2	Prequalification Result Code	Defines the result of the available customer access transport inquiry.	alpha/ numeric	1-40 chars Example values are defined in Section 5.7.		
3	**Customer Access Transport Service List**	Identifies customer access transport services offered by a service provider.				
3.1	Customer Access Transport Service		Customer Access Transport Service	See Table 21:	Optional	

4.1.2.6 Determine Available RBN Transport Service

4.1.2.6.1 Determine Available RBN Transport Service Request

Table 66: Determine Available RBN Transport Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Service Address**	Address of the service location.	Free-Form Address	See Table 9:	Required	
3	**Service Request Constraint List**	List of constraint types and values.				

Table 66: Determine Available RBN Transport Service Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3.1	Service Request Constraint		Service Request Constraint	See Table 26:	Optional	

4.1.2.6.2 Determine Available RBN Transport Service Response

Table 67: Determine Available RBN Transport Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Prequalification Result Code	Defines the result of the available RBN transport inquiry.	alpha/ numeric	1-40 chars Example values are defined in Section 5.7.	Required	
3	**RBN Transport Service List**	Identifies RBN transport services offered by a service provider.				
3.1	RBN Transport Service		RBN Transport Service	See Table 22:	Required	

4.1.2.7 Determine Available Physical DSL Service

4.1.2.7.1 Determine Available Physical DSL Service Request

Table 68: Determine Available Physical DSL Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Service Address**	Address of the service location.	Free-Form Address	See Table 9:	Optional	
3	**Service Request Constraint List**	List of constraint types and values.				
3.1	Service Request Constraint		Service Request Constraint	See Table 26:	Optional	

4.1.2.7.2 Determine Available Physical DSL Service Response

Table 69: Determine Available Physical DSL Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Prequalification Result Code	Defines the result of the available physical DSL services inquiry.	alpha/ numeric	1-40 chars Example values are defined in Section 5.7.	Required	
3	**DSL Service List**	Identifies physical DSL services offered by a service provider.				
3.1	DSL Service		Physical DSL Service	See Table 23:	Required	

Table 69: Determine Available Physical DSL Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
4	**Available Upstream Speed**	Upstream speed in Kbps	integer	1-6 chars	Required	
5	**Available Downstream Speed**	Downstream speed in KPBS	integer	1-6 chars	Required	

4.1.2.8 Determine Available Loop Service

4.1.2.8.1 Determine Available Loop Service Request

Table 70: Determine Available Loop Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Central Office**	Identifies the location code of the loop origination point.	National Central Office	See Table 15: Also, see Tables in Section A.2 for central office information on a per locale basis.	Required	

4.1.2.8.2 Determine Available Loop Service Response

Table 71: Determine Available Loop Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					

Table 71: Determine Available Loop Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Prequalification Result Code	Defines the result of the available loop service inquiry.	alpha/ numeric	1-40 chars Example values are defined in Section 5.7.	Required	
3	**Loop Service List**	Identifies loop services offered by a service provider.				
3.1	Loop Service		Loop Service	See Table 24:	Required	

4.1.2.9 Determine Compatible CPE

4.1.2.9.1 Determine Compatible CPE Request

Table 72: Determine Compatible CPE Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Service Address**	Address of the service location.	Free-Form Address	See Table 9:	Required	
3	**Service Request Constraint List**	List of constraint types and values.				
3.1	Service Request Constraint		Service Request Constraint	See Table 26:	Required	

4.1.2.9.2 Determine Compatible CPE Response

Table 73: Determine Compatible CPE Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Prequalification Result Code	Defines the result of the compatible CPE inquiry.	alpha/ numeric	1-40 chars Example values are defined in Section 5.7.	Required	
3	**CPE List**	Identifies a list of compatible CPE types.				
3.1	CPE		CPE	See Table 16:	Required	

4.1.3 New Service

4.1.3.1 Order Broadband Service

4.1.3.1.1 Order Broadband Service Request

Table 74: Order Broadband Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Subscriber Name**	Identifies the end-user name, for whom broadband service is being requested.	Name	See Table 11:	Required	

Table 74: Order Broadband Service Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Requestor Subscriber ID**	Identity of the Subscriber as known to the requestor.	alpha/ numeric	1-40 chars	Optional	For requestor use -- usually an account or billing code.
4	**Requestor Affiliate Subscriber ID**	Identity of the Subscriber, as known to the affiliate.	alpha/ numeric	1-40 chars	Optional	For requestor affiliate use.
5	**Service Location Information**	Service address, building and jack information.	Service Location Information	See Table 28:	Required	
6	**Billing Contact Information**	Identifies a billing contact for the order.	Contact Information	See Table 18:	Required	
7	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	
8	**Requestor Business Contact**	Identifies a contact for service account information.	Contact Information	See Table 18:	Optional	It is not assumed that the requestor will relay similar information from downstream requests.
9	**Requestor Business Contact Availability**	Identifies availability of account contact.	Availability Information	See Table 30:	Optional	
10	**Requestor Technical Contact**	Identifies a contact for technical circuit information.	Contact Information	See Table 18:	Optional	It is not assumed that the requestor will relay similar information from downstream requests.

Table 74: Order Broadband Service Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
11	**Requestor Technical Contact Availability**	Identifies availability of technical contact.	Availability Information	See Table 30:	Optional	
12	**Service Name**	The name used by the service provider to identify the Broadband Service.	alpha/ numeric, allow hyphens and spaces	1-40 chars	Required	
13	**Broadband Service Configuration Information**	Description of how the requestor would like the service configured.	Broadband Service Configuration Information	See Table 35:	Required	
14	**Prequalification Reference ID**	Ref-ID for ILECs, prequal results, etc. The ID which was returned by the provider in the "Determine DSL Capability Response".	alpha/ numeric, allow hyphens	1-40 chars	Optional	Used by RBOCs and possibly others.
15	**Notes**	Any comments associated with the request are submitted here.	free-form text	1-150 chars	Optional	

4.1.3.1.2 Order Broadband Service Response

Table 75: Order Broadband Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Service Address**	The service address submitted in the request.	National Address	See Table 8:	Optional	Not all Providers will return this.
3	**Telephone Number**	The telephone number associated with the service address.	Telephone Number	See Table 10:	Optional	Not all Providers will return this.
4	**Result Attributes**					

Table 75: Order Broadband Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
4.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
4.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
4.3	Description	A textual description of the order result.	free-form text	1-150 characters	Optional	
5	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.			Conditional	Required if Result Type indicates success.
5.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
5.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	
5.3	Broadband Service ID	Identifies the Broadband Service which is being established for a particular end-user.	alpha/ numeric	1-40 chars	Optional	
5.4	Provider ID	Identifies the provider of the service identified by Broadband Service ID	Provider Information	See Table 47:	Required	
5.5	Provider Information List	Identifies other providers involved in providing the Broadband Service.				
5.6	Provider Information		Provider Information	See Table 47:	Optional	
5.7	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.1.3 Broadband Service Status Request

Table 76: Broadband Service Status Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	

4.1.3.1.4 Broadband Service Status Response

Table 77: Broadband Service Status Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Status Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.9.	Required	
2.3	Description	Textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.			Conditional	Required if Result Type indicates success.
3.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	

Table 77: Broadband Service Status Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	
3.3	Broadband Service ID	Identifies the Broadband Service which is being established on behalf of an end-user.	alpha/ numeric	1-40 chars	Optional	
3.4	Provider ID	Identifies the provider of the service identified by Broadband Service ID	Provider Information	See Table 47:	Required	
3.5	Provider Information List	Identifies other providers involved in providing the Broadband Service.				
3.6	Provider Information		Provider Information	See Table 47:	Optional	
3.7	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.1.5 Broadband Service Status Notification

Table 78: Broadband Service Status Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	
2	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.				
2.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
2.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	

Table 78: Broadband Service Status Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.3	Broadband Service ID	Identifies the Broadband Service which is being established on behalf of an end-user.	alpha/ numeric	1-40 chars	Required	
2.4	Provider ID	Identifies the provider of the service identified by Broadband Service ID	Provider Information	See Table 47:	Required	
2.5	Provider Information List	Identifies other providers involved in providing the Broadband Service.				
2.6	Provider Information		Provider Information	See Table 47:		
2.7	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.2 Order Network Service

4.1.3.2.1 Order Network Service Request

Table 79: Order Network Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Service Name**	The Service Name for the Network Service, as returned by the provider in the "Determine Available Network Service Response."	alpha/ numeric, allow hyphens and spaces	1-40 chars	Required	
3	**Network Service Configuration Information**	Description of how the requestor would like the service configured.	Network Service Configuration Information	See Table 36:	Required	

Table 79: Order Network Service Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
4	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.3.2.2 Order Network Service Response

Table 80: Order Network Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Identifies the type of result.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the order result.	free-form text	1-150 chars	Optional	
3	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.			Conditional	Required if Result Type indicates success.
3.1	Order Received Timestamp	Indicates when the order was received by the responder.	Date and Time	See Table 3:	Required	
3.2	Due Date	A date returned by the service provider to indicate earliest possible installation, to convey workload.	Date	See Table 1:	Optional	
3.3	Network Service ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Optional	

Table 80: Order Network Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3.4	Provider ID	Identifies the provider of the service identified by Network Service ID	Provider Information	See Table 47:	Required	
3.5	Provider Information List	Identifies other providers involved in providing the Network Service.				
3.6	Provider Information		Provider Information	See Table 47:	Required	
3.7	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.2.3 Network Service Status Request

Table 81: Network Service Status Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	

4.1.3.2.4 Network Service Status Response

Table 82: Network Service Status Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	

Table 82: Network Service Status Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Status Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.9.	Required	
2.3	Description		alpha/ numeric	1-150 chars	Optional	
3	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.			Conditional	Required if Result Type indicates success.
3.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
3.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	
3.3	Network Service ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Required	
3.4	Provider ID	Identifies the provider of the service identified by Network Service ID	Provider Information	See Table 47:	Required	
3.5	Provider Information List	Identifies other providers involved in providing the Network Service.				
3.6	Provider Information		Provider Information	See Table 47:	Optional	
3.7	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.2.5 Network Service Status Notification

Table 83: Network Service Status Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	
2	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.				
2.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
2.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	
2.3	Network Service ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Optional	
2.4	Provider ID	Identifies the provider of the service identified by Network Service ID	Provider Information	See Table 47:	Required	
2.5	Provider Information List	Identifies other providers involved in providing the Network Service.				
2.6	Provider Information		Provider Information	See Table 47:	Required	
2.7	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.3 Order Customer Access Transport Service

4.1.3.3.1 Order Customer Access Transport Service Request

Table 84: Order Customer Access Transport Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Service Name**	The Service Name for the Customer Access Transport Service, as returned by the provider in the "Determine Available Customer Access Transport Response."	alpha/ numeric, allow hyphens and spaces	1-40 chars	Required	
3	**Customer Access Transport Service Configuration Information**	Description of how the requestor would like the service configured.	Customer Access Transport Service Configuration Information	See Table 37:	Required	
4	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.3.3.2 Order Customer Access Transport Service Response

Table 85: Order Customer Access Transport Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	

Table 85: Order Customer Access Transport Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the order result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.			Conditional	Required if Result Type indicates success.
3.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
3.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Required	
3.3	Customer Access Transport Service ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Required	
3.4	Provider ID	Identifies the provider of the service identified by Customer Access Transport Service ID	Provider Information	See Table 47:	Required	
3.5	Provider Information List	Identifies other providers involved in providing the Customer Access Transport Service.				
3.6	Provider Information		Provider Information	See Table 47:	Required	
3.7	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.3.3 Customer Access Transport Service Status Request

Table 86: Customer Access Transport Service Status Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	

4.1.3.3.4 Customer Access Transport Service Status Response

Table 87: Customer Access Transport Service Status Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Status Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.9.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.			Conditional	Required if Result Type indicates success.
3.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	

Table 87: Customer Access Transport Service Status Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	Returned by ILEC to indicate earliest possible installation, to convey workload.
3.3	Customer Access Transport Service ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Required	
3.4	Provider ID	Identifies the provider of the service identified by Customer Access Transport Service ID	Provider Information	See Table 47:	Required	
3.5	Provider Information List	Identifies other providers involved in providing the Customer Access Transport Service.				
3.6	Provider Information		Provider Information	See Table 47:	Required	
3.7	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.3.5 Customer Access Transport Service Status Notification

Table 88: Customer Access Transport Service Status Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	
2	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.				
2.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	

Table 88: Customer Access Transport Service Status Notification (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	
2.3	Customer Access Transport Service ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Required	
2.4	Provider ID	Identifies the provider of the service identified by Customer Access Transport Service ID	Provider Information	See Table 47:	Required	
2.5	Provider Information List	Identifies other providers involved in providing the Customer Access Transport Service.				
2.6	Provider Information		Provider Information	See Table 47:	Required	
2.7	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.4 Order RBN Transport Service

4.1.3.4.1 Order RBN Transport Service Request

Table 89: Order RBN Transport Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Service Name**	The Service Name for the Customer Access Transport Service, as returned by the provider in the "Determine Available RBN Transport Service Response."	alpha/ numeric, allow hyphens and spaces	1-40 chars	Required	

Table 89: Order RBN Transport Service Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**RBN Transport Service Configuration Information**	Description of how the requestor would like the service configured.	RBN Transport Service Configuration Information	See Table 38:	Required	

4.1.3.4.2 Order RBN Transport Service Response

Table 90: Order RBN Transport Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.		
2.3	Description	A textual description of the order result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.			Conditional	Required if Result Type indicates success.
3.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
3.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	
3.3	RBN Transport Service ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Optional	

Table 90: Order RBN Transport Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3.4	Provider ID	Identifies the provider of the service identified by RBN Transport Service ID	Provider Information	See Table 47:	Required	
3.5	Provider Information List	Identifies other providers involved in providing the RBN Transport Service.				
3.6	Provider Information		Provider Information		Required	

4.1.3.4.3 RBN Transport Service Status Request

Table 91: RBN Transport Service Status Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	

4.1.3.4.4 RBN Transport Service Status Response

Table 92: RBN Transport Service Status Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	

Table 92: RBN Transport Service Status Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.2	Status Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.9.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.			Conditional	Required if Result Type indicates success.
3.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
3.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Required	
3.3	RBN Transport Service ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Optional	
3.4	Provider ID	Identifies the provider of the service identified by RBN Transport Service ID	Provider Information	See Table 47:	Required	
3.5	Provider Information List	Identifies other providers involved in providing the RBN Transport Service.				
3.6	Provider Information		Provider Information	See Table 47:	Required	

4.1.3.4.5 RBN Transport Service Status Notification

Table 93: RBN Transport Service Status Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	
2	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.				

Table 93: RBN Transport Service Status Notification (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
2.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Required	
2.3	RBN Transport Service ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Optional	
2.4	Provider ID	Identifies the provider of the service identified by RBN Transport Service ID	Provider Information	See Table 47:	Required	
2.5	Provider Information List	Identifies other providers involved in providing the RBN Transport Service.				
2.6	Provider Information		Provider Information	See Table 47:	Required	

4.1.3.5 Order Physical DSL Service

4.1.3.5.1 Order Physical DSL Service Request

Table 94: Order Physical DSL Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Service Name**	The Service Name for the Physical DSL Service, as returned by the provider in the "Determine Available Physical DSL Service Response."	alpha/ numeric, allow hyphens and spaces	1-40 chars	Required	
3	**Physical DSL Service Configuration Information**	Description of how the requestor would like the service configured.	Physical DSL Service Configuration Information	See Table 39:	Required	
4	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.3.5.2 Order Physical DSL Service Response

Table 95: Order Physical DSL Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the order result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.			Conditional	Required if Result Type indicates success.
3.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
3.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	
3.3	ATUC Termination Information	Information about the ATUC termination for the physical DSL service.	ATUC Termination Information	See Table 48:	Required	
3.4	Physical DSL Service ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Required	
3.5	Provider ID	Identifies the provider of the service identified by Physical DSL Service ID	Provider Information	See Table 47:	Required	
3.6	Provider Information List	Identifies other providers involved in providing the Physical DSL Service.				
3.7	Provider Information		Provider Information	See Table 47:	Required	

Table 95: Order Physical DSL Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3.8	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.5.3 Physical DSL Service Status Request

Table 96: Physical DSL Service Status Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	

4.1.3.5.4 Physical DSL Service Status Response

Table 97: Physical DSL Service Status Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	

Table 97: Physical DSL Service Status Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.2	Status Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.9.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.			Conditional	Required if Result Type indicates success.
3.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
3.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	
3.3	ATUC Termination Information	Information about the ATUC termination for the physical DSL service.	ATUC Termination Information	See Table 48:	Required	
3.4	Physical DSL Service ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Required	
3.5	Provider ID	Identifies the provider of the service identified by Physical DSL Service ID	Provider Information	See Table 47:	Required	
3.6	Provider Information List	Identifies other providers involved in providing the Physical DSL Service				
3.7	Provider Information		Provider Information	See Table 47:	Required	
3.8	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.5.5 Physical DSL Service Status Notification

Table 98: Physical DSL Service Status Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	
2	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.				
2.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
2.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	
2.3	ATUC Termination Information	Information about the ATUC termination for the physical DSL service.	ATUC Termination Information	See Table 48:	Required	
2.4	Physical DSL Service ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Required	
2.5	Provider ID	Identifies the provider of the service identified by Physical DSL Service ID	Provider Information	See Table 47:	Required	
2.6	Provider Information List					
2.7	Provider Information		Provider Information	See Table 47:	Required	
2.8	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.6 Order Loop

The OBF defines guidelines for customers to order unbundled loops from Loop Providers within the United States. The data elements are defined in the Local Service Ordering Guidelines (LSOG) Issue 5, and currently Loop Providers use EDI as the data exchange protocol for loop ordering.

4.1.3.6.1 Order Loop Request

Table 99: Order Loop Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Loop Service**	The type of service being ordered, as returned by the provider in the "Determine Available Loop Service Response."	Loop Service	See Table 24:	Required	
3	**Loop Service Configuration Information**	Description of how the requestor would like the service configured.	Loop Service Configuration Information	See Table 40:	Required	
4	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.3.6.2 Order Loop Response

Table 100: Order Loop Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the order result.	free-form text	1-150 characters	Optional	

Table 100: Order Loop Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Success Attributes**				Conditional	Required if Result Type indicates success.
3.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
3.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	
3.3	Loop Circuit ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Required	
3.4	Provider ID	Identifies the provider of the service identified by Loop Circuit ID	Provider Information	See Table 47:	Required	
3.5	Provider Information List	Identifies other providers involved in providing the Loop Service.				
3.6	Provider Information		Provider Information	See Table 47:	Required	
3.7	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.6.3 Loop Status Request

Table 101: Loop Status Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	

4.1.3.6.4 Loop Status Response

Table 102: Loop Status Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Status Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.9.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**				Conditional	Required if Result Type indicates success.
3.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
3.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	
3.3	Loop Circuit ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Required	
3.4	Provider ID	Identifies the provider of the service identified by Loop Circuit ID	Provider Information	See Table 47:	Required	
3.5	Provider Information List	Identifies other providers involved in providing the Loop Service.				
3.6	Provider Information		Provider Information	See Table 47:	Required	

Table 102: Loop Status Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3.7	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.6.5 Loop Status Notification

Table 103: Loop Status Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	
2	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.				
2.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
2.2	Due Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	
2.3	Loop Circuit ID	Identifies the service which is being provisioned.	alpha/ numeric	1-40 chars	Required	
2.4	Provider ID	Identifies the provider of the service identified by Loop Circuit ID	Provider Information	See Table 47:	Required	
2.5	Provider Information List	Identifies other providers involved in providing the Loop Service.				
2.6	Provider Information		Provider Information	See Table 47:	Required	

Table 103: Loop Status Notification (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.7	Service Location Appointment Availability	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.7 Order CPE

4.1.3.7.1 Order CPE Request

Table 104: Order CPE Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**CPE**	Identifies a particular CPE, including model and serial number.	CPE	See Table 16:	Required	
3	**CPE Configuration Information**	Information about how the CPE should be configured.	CPE Configuration Information	See Table 41:	Conditional	Required when the CPE provider is configuring the CPE.
4	**Shipping Information**	Information about where the CPE is to be shipped.	Contact Information	See Table 18:	Conditional	Required if CPE is to be drop-shipped.
	Signature Required Upon Delivery	Defines whether shipper should require signature for delivery of CPE.	boolean		Conditional	Required if Shipping Information is present.

4.1.3.7.2 Order CPE Response

Table 105: Order CPE Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	Notes/Remarks associated with the response/notification.	free-form text	1-150 characters	Optional	
3	**Success Attributes**				Conditional	Required if Result Type indicates success.
3.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
3.2	Ship Date	Returned by the service provider to indicate earliest possible service activation, to convey workload.	Date	See Table 1:	Optional	
3.3	CPE Configuration Information	Information about how the CPE is to be configured.	CPE Configuration Information	See Table 41:	Optional	May be returned by the CPE provider to instruct a self-install or self-configure.

4.1.3.7.3 CPE Status Request

Table 106: CPE Status Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	

4.1.3.7.4 CPE Status Response

Table 107: CPE Status Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Status Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.9.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.			Conditional	Required if Result Type indicates success.
3.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	

Table 107: CPE Status Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3.2	Ship Date	Returned by the service provider to indicate expected ship date.	Date	See Table 1:	Optional	
3.3	CPE Configuration Information	Information about how to configure the CPE.	CPE Configuration Information	See Table 41:	Optional	

4.1.3.7.5 CPE Status Notification

Table 108: CPE Status Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	
2	**Success Attributes**	Success implies that the required speed is possibly confirmed, but not necessarily so.				
2.1	Order Received Timestamp	The date and time the request was received by the service provider.	Date and Time	See Table 3:	Required	
2.2	Ship Date	Returned by the service provider to indicate expected ship date.	Date	See Table 1:	Optional	
2.3	CPE Configuration Information	Information about how to configure the CPE.	CPE Configuration Information	See Table 41:	Optional	

4.1.3.8 Order Installation

4.1.3.8.1 Order Installation Request

Table 109: Order Installation Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	

Table 109: Order Installation Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2	**Own Rent Lease**	Indicates whether the service address is owned, rented or leased by the end user.	enumeration	Valid values are: own rent lease	Required	
3	**Number of Lines In Service**	The number of telephone lines currently in service at the service address.	integer	1-2 chars	Required	
4	**Service Line Entry**	Indicates how the telephone wiring is laid.	enumeration	Valid values are: aerial, underground	Required	
5	**Install Type (service location information)**	Indicates whether the service address is a residence or business.	alpha/ numeric	1-40 chars Example values are defined in Section 5.44	Required	
6	**Landlord**	Name of landlord.	Free Form Name	See Table 12:	Conditional	Required if Own-RentLease=rent
7	**Landlord Telephone**	Telephone number of landlord.	Telephone Number	See Table 10:	Conditional	Required if Own-RentLease=rent
8	**ISDN Number**	Indicates whether there is IDSN installed at the service location.	Telephone Number	See Table 10:	Optional	
9	**Insurance Information**		Insurance Information	See Table 49:	Required	
10	**Inside Wiring Authorized**	Indicates whether inside wiring is authorized.	boolean		Required	
11	**Inside Wiring Responsibility**	Indicates who is responsible for any necessary inside wiring.	alpha/ numeric	1-40 chars Example values are defined in Section 5.25.	Required	
12	**CPE Configuration Information List**	For each CPE being installed at the premise, include information about how the CPE shall be configured				

Table 109: Order Installation Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
12.1	CPE Configuration Information	Information about how to configure the CPE.	CPE Configuration Information	See Table 41:	Conditional	Required when the installer is configuring the CPE.
13	**NID Location**	Location of Network Interface Device.	alpha/ numeric	1-40 chars Example values are defined in Section 5.29.	Required	
14	**Building Type**	The type of building.	alpha/ numeric	1-40 chars Example values are defined in Section 5.30.	Required	
15	**Service Location Information**	Information about the service location.	Service Location Information	See Table 28:	Optional	
16	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.3.8.2 Order Installation Response

Table 110: Order Installation Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	

Table 110: Order Installation Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.8.3 Installation Status Request

Table 111: Installation Status Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	

4.1.3.8.4 Installation Status Response

Table 112: Installation Status Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	

Table 112: Installation Status Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Status Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.9.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.3.8.5 Installation Status Notification

Table 113: Installation Status Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	
2	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.4 Modify Pending Order

A pending order can be modified prior to order completion. These interactions are

intended to modify a previously placed, in progress order. These interactions are not used to modify a service, but rather to modify an order.

4.1.4.1 Change Broadband Service Order

4.1.4.1.1 Change Broadband Service Order Request

Table 114: Change Broadband Service Order Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	
3	**Subscriber Name**	Identifies the end-user name, for whom broadband service is being requested.	Name	See Table 11:	Required	
4	**Requestor Subscriber ID**	Identity of the Subscriber as known to the requestor.	alpha/ numeric	1-40 chars	Optional	For requestor use -- usually an account or billing code.
5	**Requestor Affiliate Subscriber ID**	Identity of the Subscriber, as known to the affiliate.	alpha/ numeric	1-40 chars	Optional	For requestor affiliate use.
6	**Service Location Information**	Service address, building and jack information.	Service Location Information	See Table 28:	Required	
7	**Billing Contact Information**	Identifies a billing contact for the order.	Contact Information	See Table 18:	Required	
8	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

Table 114: Change Broadband Service Order Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
9	**Requestor Business Contact**	Identifies a contact for service account information.	Contact Information	See Table 18:	Optional	It is not assumed that the requestor will relay similar information from downstream requests.
10	**Requestor Business Contact Availability**	Identifies availability of account contact.	Availability Information	See Table 30:	Optional	
11	**Requestor Technical Contact**	Identifies a contact for technical circuit information.	Contact Information	See Table 18:	Optional	It is not assumed that the requestor will relay similar information from downstream requests.
12	**Requestor Technical Contact Availability**	Identifies availability of technical contact.	Availability Information	See Table 30:	Optional	
13	**Service Name**	The Service Name for the Broadband Service, as returned by the provider in the "Determine Available Broadband Service Response."	alpha/ numeric, allow hyphens and spaces	1-40 chars	Required	
14	**Broadband Service Configuration Information**	Description of how the requestor would like the service configured.	Broadband Service Configuration Information	See Table 35:	Required	
15	**Notes**	Any comments associated with the request are submitted here.	free-form text	1-150 chars	Optional	

4.1.4.1.2 Change Broadband Service Order Response

Table 115: Change Broadband Service Order Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.4.2 Change Loop Order

4.1.4.2.1 Change Loop Order Request

Table 116: Change Loop Order Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	

Table 116: Change Loop Order Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	
3	**Loop Service Configuration Information**	Description of how the requestor would like the service configured.	Loop Service Configuration Information	See Table 40:	Required	
4	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.4.2.2 Change Loop Order Response

Table 117: Change Loop Order Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

Table 117: Change Loop Order Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.5 Cancel Order

A pending order can be cancelled prior to order completion. These interactions are intended to cancel a previously placed, in progress order. These interactions are not used to disconnect a service.

4.1.5.1 Cancel Broadband Service Order

4.1.5.1.1 Cancel Broadband Service Order Request

Table 118: Cancel Broadband Service Order Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	
3	**Cancel Reason Code**	A code indicating the reason for the cancel request.	alpha/ numeric	1-40 chars Example values are defined in Section 5.12.	Required	
4	**Cancel Description**	A textual description of the cancel reason.	free-form text	1-150 characters	Optional	
5	**Notes**	Remarks associated with the request.	free-form text	1-150 characters	Optional	

4.1.5.1.2 Cancel Broadband Service Order Response

Table 119: Cancel Broadband Service Order Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

4.1.5.2 Cancel RBN Transport Service Order

4.1.5.2.1 Cancel RBN Transport Service Order Request

Table 120: Cancel RBN Transport Service Order Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	
3	**Cancel Reason Code**	A code indicating the reason for the cancel request.	enumeration	Valid values are defined in Section 5.12.	Required	

Table 120: Cancel RBN Transport Service Order Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
4	**Cancel Description**	A textual description of the cancel reason.	free-form text	1-150 characters	Optional	
5	**Notes**	Remarks associated with the request.	free-form text	1-150 characters	Optional	

4.1.5.2.2 Cancel RBN Transport Service Order Response

Table 121: Cancel RBN Transport Service Order Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

4.1.5.3 Cancel Physical DSL Service Order

4.1.5.3.1 Cancel Physical DSL Service Order Request

Table 122: Cancel Physical DSL Service Order Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	

Table 122: Cancel Physical DSL Service Order Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	
3	**Cancel Reason Code**	A code indicating the reason for the cancel request.	enumeration	Valid values are defined in Section 5.12.	Required	
4	**Cancel Description**	A textual description of the cancel reason.	free-form text	1-150 characters	Optional	
5	**Notes**	Remarks associated with the request.	free-form text	1-150 characters	Optional	

4.1.5.3.2 Cancel Physical DSL Service Order Response

Table 123: Cancel Physical DSL Service Order Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.n	free-form text	1-150 characters	Optional	

4.1.5.4 Cancel Loop Order

4.1.5.4.1 Cancel Loop Order Request

Table 124: Cancel Loop Order Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	
3	**Cancel Reason Code**	A code indicating the reason for the cancel request.	enumeration	Valid values are defined in Section 5.12.	Required	
4	**Cancel Description**	A textual description of the cancel reason.	free-form text	1-150 characters	Optional	
5	**Notes**	Remarks associated with the request.	free-form text	1-150 characters	Optional	

4.1.5.4.2 Cancel Loop Order Response

Table 125: Cancel Loop Order Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	

Table 125: Cancel Loop Order Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

4.1.5.5 Cancel CPE Order

4.1.5.5.1 Cancel CPE Order Request

Table 126: Cancel CPE Order Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	
3	**Cancel Reason Code**	A code indicating the reason for the cancel request.	enumeration	Valid values are defined in Section 5.12.	Required	
4	**Cancel Description**	A textual description of the cancel reason.	free-form text	1-150 characters	Optional	
5	**Notes**	Remarks associated with the request.	free-form text	1-150 characters	Optional	

4.1.5.5.2 Cancel CPE Order Response

Table 127: Cancel CPE Order Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.n	free-form text	1-150 characters	Optional	

4.1.5.6 Cancel Installation Order

4.1.5.6.1 Cancel Installation Order Request

Table 128: Cancel Installation Order Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Original Responder Order ID**	This corresponds to the Responder Order ID which was returned to the requestor in the response to the original request.	alpha/ numeric	1-16 characters	Required	
3	**Cancel Reason Code**	A code indicating the reason for the cancel request.	enumeration	Valid values are defined in Section 5.12.	Required	

Table 128: Cancel Installation Order Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
4	**Cancel Description**	A textual description of the cancel reason.	free-form text	1-150 characters	Optional	
5	**Notes**	Remarks associated with the request.	free-form text	1-150 characters	Optional	

4.1.5.6.2 Cancel Installation Order Response

Table 129: Cancel Installation Order Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

4.1.6 Change Service

A Change Service activity is used when modifying a service which has already been provisioned.

Examples of what can be changed on a service include:

- Change speed to downgrade or upgrade speed
- Change DSL Service Type
- CPE Change
  - Change to a different type of CPE (upgrade)
  - Add an additional CPE (home LAN)

- Record Change - to change records associated with the service (such as a billing address, or customer name) but not to physically make changes to the installed service.
- Change Vertical Features - to add additional services such as gaming applications, video or audio.

4.1.6.1 Change Broadband Service

4.1.6.1.1 Change Broadband Service Request

Table 130: Change Broadband Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Broadband Service ID**	Identifies the Broadband Service which is being changed on behalf of an end-user.	alpha/ numeric	1-40 chars	Required	
3	**Broadband Service Configuration Information**	Identifies how the broadband service should be configured, including any changes to existing configuration parameters.	Broadband Service Configuration Information	See Table 35:	Required	
4	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.6.1.2 Change Broadband Service Response

Table 131: Change Broadband Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification		Required	
2	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

Table 131: Change Broadband Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Result Attributes**					
3.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
3.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
3.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

4.1.6.2 Change Network Service

4.1.6.2.1 Change Network Service Request

Table 132: Change Network Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Network Service ID**	Identifies the service being changed.	alpha/ numeric	1-40 chars	Required	
3	**Network Service Configuration Information**	Description of how the requestor would like the service configured.	Network Service Configuration Information	See Table 36:	Required	
4	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.6.2.2 Change Network Service Response

Table 133: Change Network Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.6.3 Change Customer Access Transport Service

4.1.6.3.1 Change Customer Access Transport Service Request

Table 134: Change Customer Access Transport Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Customer Access Transport Service ID**	Identifies the customer access transport service being changed.	alpha/ numeric	1-40 chars	Required	

Table 134: Change Customer Access Transport Service Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Customer Access Transport Service Configuration Information**	Description of how the requestor would like the service configured.	Customer Access Transport Service Configuration Information	See Table 37:	Required	
4	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.6.3.2 Change Customer Access Transport Service Response

Table 135: Change Customer Access Transport Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.6.4 Change RBN Transport Service

4.1.6.4.1 Change RBN Transport Service Request

Table 136: Change RBN Transport Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**RBN Transport Service ID**	Identity of the RBN transport service being changed.	alpha/ numeric	1-40 chars	Required	
3	**RBN Transport Service Configuration Information**	Description of how the requestor would like the service configured.	RBN Transport Service Configuration Information	See Table 38:	Required	

4.1.6.4.2 Change RBN Transport Service Response

Table 137: Change RBN Transport Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

4.1.6.5 Change Physical DSL Service

4.1.6.5.1 Change Physical DSL Service Request

Table 138: Change Physical DSL Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Physical DSL Service ID**	Identity of the physical DSL service being changed.	alpha/ numeric	1-40 chars	Required	
3	**Physical DSL Service Configuration Information**	Description of how the requestor would like the service configured.	Physical DSL Service Configuration Information	See Table 39:	Required	
4	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.6.5.2 Change Physical DSL Service Response

Table 139: Change Physical DSL Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification		Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

Table 139: Change Physical DSL Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.6.6 Change Loop

A Change Loop activity is also used for Inside and Outside Move. An Inside Move is when an end user is changing loop location, but within the same Central Office. An Outside Move is when an end user is changing loop location to a different CO.

4.1.6.6.1 Change Loop Request

Table 140: Change Loop Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Loop Circuit ID**	Identity of the loop service being changed.	alpha/ numeric	1-40 chars	Required	
3	**Loop Service Configuration Information**	Description of how the requestor would like the service configured.	Loop Service Configuration Information	See Table 40:	Required	
4	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.6.6.2 Change Loop Response

Table 141: Change Loop Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.7 Disconnect Service

A Disconnect Service activity is used when disconnecting a service which is already provisioned.

4.1.7.1 Disconnect Broadband Service

4.1.7.1.1 Disconnect Broadband Service Request

Table 142: Disconnect Broadband Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	

Table 142: Disconnect Broadband Service Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2	**Broadband Service ID**	Identifies the Broadband Service which is being disconnected on behalf of an end-user.	alpha/ numeric	1-40 chars	Required	
3	**Discontinue Billing Effective Date**	Date when billing for service should cease.	Date	See Table 1:	Required	
4	**Disconnect Reason Code**	Code identifying why service disconnect is being requested.	alpha/ numeric	1-40 chars Example values are defined in Section 5.21.	Required	
5	**Disconnect Description**	A textual description of the disconnect reason.	free-form text	1-150 chars	Optional	
6	**Notes**	Any remarks associated with the request.	free-form text	1-150 chars	Optional	
7	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.7.1.2 Disconnect Broadband Service Response

Table 143: Disconnect Broadband Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	

Table 143: Disconnect Broadband Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.7.2 Disconnect Network Service

4.1.7.2.1 Disconnect Network Service Request

Table 144: Disconnect Network Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Network Service ID**	Identifies the network service which is being disconnected.	alpha/ numeric	1-40 chars	Required	
3	**Discontinue Billing Effective Date**	Date when billing for service should cease.	Date	See Table 1:	Required	
4	**Disconnect Reason Code**	Code identifying why service disconnect is being requested.	alpha/ numeric	1-40 chars Example values are defined in Section 5.21.	Required	
5	**Disconnect Description**	A textual description of the disconnect reason.	free-form text	1-150 chars	Optional	
6	**Notes**	Any remarks associated with the request.	free-form text	1-150 chars	Optional	
7	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.7.2.2 Disconnect Network Service Response

Table 145: Disconnect Network Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.7.3 Disconnect Customer Access Transport Service

4.1.7.3.1 Disconnect Customer Access Transport Service Request

Table 146: Disconnect Customer Access Transport Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Customer Access Transport Service ID**	Identifies the customer access transport service being disconnected.	alpha/ numeric	1-40 chars	Required	

Table 146: Disconnect Customer Access Transport Service Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Discontinue Billing Effective Date**	Date when billing for service should cease.	Date	See Table 1:	Required	
4	**Disconnect Reason Code**	Code identifying why service disconnect is being requested.	alpha/ numeric	1-40 chars Example values are defined in Section 5.21.	Required	
5	**Disconnect Description**	A textual description of the disconnect reason.	free-form text	1-150 chars	Optional	
6	**Notes**	Any remarks associated with the request.	free-form text	1-150 chars	Optional	
7	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.7.3.2 Disconnect Customer Access Transport Service Response

Table 147: Disconnect Customer Access Transport Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification		Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

Table 147: Disconnect Customer Access Transport Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.7.4 Disconnect RBN Transport Service

4.1.7.4.1 Disconnect RBN Transport Service Request

Table 148: Disconnect RBN Transport Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**RBN Transport Service ID**	Identifies the RBN transport service being disconnected.	alpha/ numeric	1-40 chars	Required	
3	**Discontinue Billing Effective Date**	Date when billing for service should cease.	Date	See Table 1:	Required	
4	**Disconnect Reason Code**	Code identifying why service disconnect is being requested.	alpha/ numeric	1-40 chars Example values are defined in Section 5.21.	Required	
5	**Disconnect Description**	A textual description of the disconnect reason.	free-form text	1-150 chars	Optional	
6	**Notes**	Any remarks associated with the request.	free-form text	1-150 chars	Optional	

4.1.7.4.2 Disconnect RBN Transport Service Response

Table 149: Disconnect RBN Transport Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

4.1.7.5 Disconnect Physical DSL Service

4.1.7.5.1 Disconnect Physical DSL Service Request

Table 150: Disconnect Physical DSL Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Physical DSL Service ID**	Identifies the particular physical DSL service being disconnected.	alpha/ numeric	1-40 chars	Required	
3	**Discontinue Billing Effective Date**	Date when billing for service should cease.	Date	See Table 1:	Required	

Table 150: Disconnect Physical DSL Service Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
4	**Disconnect Reason Code**	Code identifying why service disconnect is being requested.	alpha/ numeric	1-40 chars Example values are defined in Section 5.21.	Required	
5	**Disconnect Description**	A textual description of the disconnect reason.	free-form text	1-150 chars	Optional	
6	**Notes**	Any remarks associated with the request.	free-form text	1-150 chars	Optional	
7	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.7.5.2 Disconnect Physical DSL Service Response

Table 151: Disconnect Physical DSL Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

Table 151: Disconnect Physical DSL Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.7.6 Disconnect Loop

4.1.7.6.1 Disconnect Loop Request

Table 152: Disconnect Loop Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Loop Circuit ID**	Identifies the loop service being disconnected.	alpha/ numeric	1-40 chars	Required	
3	**Discontinue Billing Effective Date**	Date when billing for service should cease.	Date	See Table 1:	Required	
4	**Disconnect Reason Code**	Code identifying why service disconnect is being requested.	alpha/ numeric	1-40 chars Example values are defined in Section 5.21.	Required	
5	**Disconnect Description**	A textual description of the disconnect reason.	free-form text	1-150 chars	Optional	
6	**Notes**	Any remarks associated with the request.	free-form text	1-150 chars	Optional	
7	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.7.6.2 Disconnect Loop Response

Table 153: Disconnect Loop Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.7.7 Disconnect CPE

4.1.7.7.1 Disconnect CPE Request

Table 154: Disconnect CPE Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	

Table 154: Disconnect CPE Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2	**Disconnect Reason Code**	Code identifying why service disconnect is being requested.	alpha/ numeric	1-40 chars Example values are defined in Section 5.21.	Required	
3	**Disconnect Description**	A textual description of the disconnect reason.	free-form text	1-150 chars	Optional	
4	**CPE**	Identifies a particular CPE, including model and serial number.	CPE	See Table 16:	Required	
5	**CPE Configuration Information**	Information about how the CPE should be configured.	CPE Configuration Information	See Table 41:	Conditional	Required when the CPE provider is configuring the CPE.
6	**Service Address**	Street address of service location.	National Address	See Table 8:	Conditional	One of Service Address, Working Telephone Number or Circuit ID is required.
7	**Notes**	Any remarks associated with the request.	free-form text	1-150 chars	Optional	

4.1.7.7.2 Disconnect CPE Response

Table 155: Disconnect CPE Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	

Table 155: Disconnect CPE Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

4.1.7.8 Disconnect Installation

4.1.7.8.1 Disconnect Installation Request

Table 156: Disconnect Installation Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Disconnect Reason Code**	Code identifying why service disconnect is being requested.	alpha/ numeric	1-40 chars Example values are defined in Section 5.21.	Required	
3	**Disconnect Description**	A textual description of the disconnect reason.	free-form text	1-150 chars	Optional	
4	**Own Rent Lease**	Indicates whether the service address is owned, rented or leased by the end user.	enumeration	Valid values are: own rent lease	Required	
5	**Number of Lines In Service**	The number of telephone lines currently in service at the service address.	integer	1-2 chars	Required	
6	**Service Line Entry**	Indicates how the telephone wiring is laid.	enumeration	Valid values are: aerial, underground	Required	

Table 156: Disconnect Installation Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
7	**Install Type (service location information)**	Indicates whether the service address is a residence or business.	alpha/ numeric	1-40 chars Example values are defined in Section 5.44	Required	
8	**Landlord**	Name of landlord.	Free Form Name	See Table 12:	Conditional	Required if Own-RentLease=rent
9	**Landlord Telephone**	Telephone number of landlord.	Telephone Number	See Table 10:	Conditional	Required if Own-RentLease=rent
10	**ISDN Number**	Indicates whether there is IDSN installed at the service location.	Telephone Number	See Table 10:	Optional	
11	**Insurance Information**		Insurance Information	See Table 49:	Required	
12	**Inside Wiring Authorized**	Indicates whether inside wiring is authorized.	boolean		Required	
13	**Inside Wiring Responsibility**	Indicates who is responsible for any necessary inside wiring.	alpha/ numeric	1-40 chars Example values are defined in Section 5.25.	Required	
14	**CPE Configuration Information List**	For each CPE being installed at the premise, include information about how the CPE shall be configured				
14.1	CPE Configuration Information	Information about how to configure the CPE.	CPE Configuration Information	See Table 41:	Conditional	Required when the installer is configuring the CPE.
15	**NID Location**	Location of Network Interface Device.	alpha/ numeric	1-40 chars Example values are defined in Section 5.29.	Required	

Table 156: Disconnect Installation Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
16	**Building Type**	The type of building.	alpha/ numeric	1-40 chars Example values are defined in Section 5.30.	Required	
17	**Service Location Information**	Information about the service location.	Service Location Information	See Table 28:	Optional	
18	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	
19	**Notes**	Any remarks associated with the request.	free-form text	1-150 chars	Optional	

4.1.7.8.2 Disconnect Installation Response

Table 157: Disconnect Installation Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification		Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

Table 157: Disconnect Installation Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.8 Suspend Service

4.1.8.1 Suspend Broadband Service

4.1.8.1.1 Suspend Broadband Service Request

Table 158: Suspend Broadband Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Broadband Service ID**	Identifies the Broadband Service which is being suspended on behalf of an end-user.	alpha/ numeric	1-40 chars	Required	
3	**Suspend Effective Date and Time**	The date and time when service should be suspended.	Date and Time	See Table 3:	Required	
4	**Suspend Reason Code**	The reason for the suspension.	alpha/ numeric	1-40 chars Example values are defined in Section 5.13.	Required	
5	**Suspend Reason Description**	An optional text to indicate the reason for the suspension.	free-form text	1-150 chars	Optional	
6	**Resume Effective Date and Time**	The date and time when service should be resumed.	Date and Time	See Table 3:	Optional	
7	**Notes**	Remarks associated with the request.	free-form text	1-150 chars	Optional	

Table 158: Suspend Broadband Service Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
8	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.8.1.2 Suspend Broadband Service Response

Table 159: Suspend Broadband Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.8.2 Suspend Network Service

4.1.8.2.1 Suspend Network Service Request

Table 160: Suspend Network Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Network Service ID**	Identity of the network service being suspended.	alpha/ numeric	1-40 chars	Required	
3	**Suspend Effective Date**	The date and time when service should be suspended.	Date and Time	See Table 3:	Required	
4	**Suspend Reason Code**	The reason for the suspension.	alpha/ numeric	1-40 chars Example values are defined in Section 5.13.	Required	
5	**Suspend Description**	An optional text to indicate the reason for the suspension.	free-form text	1-150 chars	Optional	
6	**Resume Effective Date and Time**	The date and time when service should be resumed.	Date and Time	See Table 3:	Optional	
7	**Notes**	Remarks associated with the request.	free-form text	1-150 chars	Optional	
8	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.8.2.2 Suspend Network Service Response

Table 161: Suspend Network Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					

Table 161: Suspend Network Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.8.3 Suspend Customer Access Transport Service

4.1.8.3.1 Suspend Customer Access Transport Service Request

Table 162: Suspend Customer Access Transport Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Customer Access Transport Service ID**	Identifies the customer access transport service being suspended.	alpha/ numeric	1-40 chars	Required	
3	**Suspend Effective Date**	The date and time when service should be suspended.	Date	See Table 1:	Required	
4	**Suspend Reason Code**	The reason for the suspension.	alpha/ numeric	1-40 chars Example values are defined in Section 5.13.	Required	

Table 162: Suspend Customer Access Transport Service Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
5	**Suspend Description**	An optional text to indicate the reason for the suspension.	free-form text	1-150 chars	Optional	
6	**Resume Effective Date and Time**	The date and time when service should be resumed.	Date and Time	See Table 3:	Optional	
7	**Notes**	Remarks associated with the request.	free-form text	1-150 chars	Optional	
8	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.8.3.2 Suspend Customer Access Transport Service Response

Table 163: Suspend Customer Access Transport Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

Table 163: Suspend Customer Access Transport Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.8.4 Suspend RBN Transport Service

4.1.8.4.1 Suspend RBN Transport Service Request

Table 164: Suspend RBN Transport Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**RBN Transport Service ID**	Identifies the RBN transport service being suspended.	alpha/ numeric	1-40 chars	Required	
3	**Suspend Effective Date**	The date and time when service should be suspended.	Date	See Table 1:	Required	
4	**Suspend Reason Code**	The reason for the suspension.	alpha/ numeric	1-40 chars Example values are defined in Section 5.13.	Required	
5	**Suspend Description**	An optional text to indicate the reason for the suspension.	free-form text	1-150 chars	Optional	
6	**Resume Effective Date and Time**	The date and time when service should be resumed.	Date and Time	See Table 3:	Optional	
7	**Notes**	Remarks associated with the request.	free-form text	1-150 chars	Optional	

4.1.8.4.2 Suspend RBN Transport Service Response

Table 165: Suspend RBN Transport Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

4.1.9 Resume Service

4.1.9.1 Resume Broadband Service

4.1.9.1.1 Resume Broadband Service Request

Table 166: Resume Broadband Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Broadband Service ID**	Identifies the service being resumed.	alpha/ numeric	1-40 chars	Required	
3	**Resume Effective Date**	The date and time when service should be resumed.	Date and Time	See Table 1:	Required	

Table 166: Resume Broadband Service Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
4	**Resume Reason Code**	The reason for the resumption.	alpha/ numeric	1-40 chars Example values are defined in Section 5.14.	Required	
5	**Resume Description**	An optional text to indicate the reason for the resumption of service.	free-form text	1-150 chars	Optional	
6	**Notes**	Remarks associated with the request.	free-form text	1-150 chars	Optional	
7	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.9.1.2 Resume Broadband Service Response

Table 167: Resume Broadband Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

Table 167: Resume Broadband Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.9.2 Resume Network Service

4.1.9.2.1 Resume Network Service Request

Table 168: Resume Network Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Network Service ID**	Identifies the service being resumed.	alpha/ numeric	1-40 chars	Required	
3	**Resume Effective Date**	The date and time when service should be resumed.	Date	See Table 1:	Required	
4	**Resume Reason Code**	The reason for the resumption.	alpha/ numeric	1-40 chars Example values are defined in Section 5.14.	Required	
5	**Resume Description**	An optional text to indicate the reason for the resumption of service.	free-form text	1-150 chars	Optional	
6	**Notes**	Remarks associated with the request.	free-form text	1-150 chars	Optional	
7	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.9.2.2 Resume Network Service Response

Table 169: Resume Network Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.9.3 Resume Customer Access Transport Service

4.1.9.3.1 Resume Customer Access Transport Service Request

Table 170: Resume Customer Access Transport Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Customer Access Transport Service ID**	Identifies the service being resumed.	alpha/ numeric	1-40 chars	Required	

Table 170: Resume Customer Access Transport Service Request (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Resume Effective Date**	The date and time when service should be resumed.	Date	See Table 1:	Required	
4	**Resume Reason Code**	The reason for the resumption.	alpha/ numeric	1-40 chars Example values are defined in Section 5.14.	Required	
5	**Resume Description**	An optional text to indicate the reason for the resumption of service.	free-form text	1-150 chars	Optional	
6	**Notes**	Remarks associated with the request.	free-form text	1-150 chars	Optional	
7	**Service Location Appointment Availability**	Identifies availability for on-site installation.	Availability Information	See Table 30:	Optional	

4.1.9.3.2 Resume Customer Access Transport Service Response

Table 171: Resume Customer Access Transport Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

Table 171: Resume Customer Access Transport Service Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3	**Service Location Appointment Availability**	Identifies availability for on-site installation. May be different than availability information included in request. Used to narrow down to an agreed upon time between requestor and responder.	Availability Information	See Table 30:	Optional	

4.1.9.4 Resume RBN Transport Service

4.1.9.4.1 Resume RBN Transport Service Request

Table 172: Resume RBN Transport Service Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**RBN Transport Service ID**	Identifies the service being resumed.	alpha/ numeric	1-40 chars	Required	
3	**Resume Effective Date**	The date and time when service should be resumed.	Date	See Table 1:	Required	
4	**Resume Reason Code**	The reason for the resumption.	alpha/ numeric	1-40 chars Example values are defined in Section 5.14.	Required	
5	**Resume Description**	An optional text to indicate the reason for the resumption of service.	free-form text	1-150 chars	Optional	
6	**Notes**	Remarks associated with the request.	free-form text	1-150 chars	Optional	

4.1.9.4.2 Resume RBN Transport Service Response

Table 173: Resume RBN Transport Service Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification		Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	

4.1.10 Service Configuration

4.1.10.1 Broadband Service Configuration

4.1.10.1.1 Broadband Service Configuration Request

Table 174: Broadband Service Configuration Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Broadband Service ID**	Identifies the Broadband Service.	alpha/ numeric	1-40 chars	Required	

4.1.10.1.2Broadband Service Configuration Response

Table 175: Broadband Service Configuration Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**				Conditional	Required if Result Type indicates success.
3.1	Broadband Service ID	Identifies the Broadband Service.	alpha/ numeric	1-40 chars	Required	
3.2	Broadband Service Configuration Information	Information about configuration of the broadband service.	Broadband Service Configuration Information	See Table 35:	Required	

4.1.10.1.3Broadband Service Change Notification

Table 176: Broadband Service Change Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	

Table 176: Broadband Service Change Notification (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2	**Broadband Service ID**	Identifies the Broadband Service.	alpha/ numeric	1-40 chars	Required	
3	**Broadband Service Configuration Information**	Information about configuration of the broadband service.	Broadband Service Configuration Information	See Table 35:	Required	

4.1.10.2 Network Service Configuration

4.1.10.2.1 Network Service Configuration Request

Table 177: Network Service Configuration Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Network Service ID**	Identifies the network service.	alpha/ numeric	1-40 chars	Required	

4.1.10.2.2 Network Service Configuration Response

Table 178: Network Service Configuration Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	

Table 178: Network Service Configuration Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**				Conditional	Required if Result Type indicates success.
3.1	Network Service ID	Identifies the network service.	alpha/ numeric	1-40 chars	Required	
3.2	Network Service Configuration Information	Information about configuration of the network service.	Network Service Configuration Information	See Table 36:	Required	

4.1.10.2.3Network Service Change Notification

Table 179: Network Service Change Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	
2	**Network Service ID**	Identifies the network service.	alpha/ numeric	1-40 chars	Required	
3	**Network Service Configuration Information**	Information about configuration of the network service.	Network Service Configuration Information	See Table 36:	Required	

4.1.10.3 Customer Access Transport Service Configuration

4.1.10.3.1 Customer Access Transport Service Configuration Request

Table 180: Customer Access Transport Service Configuration Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Customer Access Transport Service ID**	Identity of the customer access transport service.	alpha/ numeric	1-40 chars	Required	

4.1.10.3.2 Customer Access Transport Service Configuration Response

Table 181: Customer Access Transport Service Configuration Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**				Conditional	Required if Result Type indicates success.
3.1	Customer Access Transport Service ID	Identity of the customer access transport service.	alpha/ numeric	1-40 chars	Required	

Table 181: Customer Access Transport Service Configuration Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3.2	Customer Access Transport Service Configuration Information	Information about configuration of the customer access transport service.	Customer Access Transport Service Configuration Information	See Table 37:	Required	

4.1.10.3.3 Customer Access Transport Service Configuration Notification

Table 182: Customer Access Transport Service Change Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	
2	**Customer Access Transport Service ID**	Identity of the customer access transport service.	alpha/ numeric	1-40 chars	Required	
3	**Customer Access Transport Service Configuration Information**	Information about configuration of the customer access transport service.	Customer Access Transport Service Configuration Information	See Table 37:	Required	

4.1.10.4 RBN Transport Service Configuration

4.1.10.4.1 RBN Transport Service Configuration Request

Table 183: RBN Transport Service Configuration Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**RBN Transport Service ID**	Identifies the RBN Transport Service established by the RBN.	alpha/ numeric	1-40 chars	Required	

4.1.10.4.2RBN Transport Service Configuration Response

Table 184: RBN Transport Service Configuration Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**				Conditional	Required if Result Type indicates success.
3.1	RBN Transport Service ID	Identifies the RBN Transport Service established by the RBN.	alpha/ numeric	1-40 chars	Required	
3.2	RBN Transport Service Configuration Information	Information about configuration of the RBN transport service.	RBN Transport Service Configuration Information	See Table 38:	Required	

4.1.10.4.3RBN Transport Service Change Notification

Table 185: RBN Transport Service Change Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	

Table 185: RBN Transport Service Change Notification (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2	**RBN Transport Service ID**	Identifies the RBN Transport Service established by the RBN.	alpha/ numeric	1-40 chars	Required	
3	**RBN Transport Service Configuration Information**	Information about configuration of the RBN transport service.	RBN Transport Service Configuration Information	See Table 38:	Required	

4.1.10.5 Physical DSL Service Configuration

4.1.10.5.1 Physical DSL Service Configuration Request

Table 186: Physical DSL Service Configuration Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Physical DSL Service ID**	Identifies the Physical DSL Service.	alpha/ numeric	1-40 chars	Required	

4.1.10.5.2 Physical DSL Service Configuration Response

Table 187: Physical DSL Service Configuration Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	

Table 187: Physical DSL Service Configuration Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**				Conditional	Required if Result Type indicates success.
3.1	Physical DSL Service ID	Identifies the Physical DSL port Service established by the provider.	alpha/ numeric	1-40 chars	Required	
3.2	Physical DSL Service Configuration Information	Information about configuration of the physical DSL service.	Physical DSL Service Configuration Information	See Table 39:	Required	

4.1.10.5.3Physical DSL Service Change Notification

Table 188: Physical DSL Service Change Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	
2	**Physical DSL Service ID**	Identifies the Physical DSL Service.	alpha/ numeric	1-40 chars	Required	
3	**Physical DSL Service Configuration Information**	Information about configuration of the physical DSL service.	Physical DSL Service Configuration Information	See Table 39:	Required	

4.1.10.6 Loop Configuration

4.1.10.6.1 Loop Configuration Request

Table 189: Loop Configuration Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**Loop Circuit ID**	Identifies the Loop CIrcuit.	alpha/ numeric	1-40 chars	Required	

4.1.10.6.2 Loop Configuration Response

Table 190: Loop Configuration Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**				Conditional	Required if Result Type indicates success.
3.1	Loop Circuit ID	Identifies the Loop Circuit established by the provider.	alpha/ numeric	1-40 chars	Required	

Table 190: Loop Configuration Response (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
3.2	Loop Service Configuration Information	Information about configuration of the loop service.	Loop Service Configuration Information	See Table 40:	Required	

4.1.10.6.3Loop Change Notification

Table 191: Loop Change Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	
2	**Loop Circuit ID**	Identifies the Loop CIrcuit.	alpha/ numeric	1-40 chars	Required	
3	**Loop Service Configuration Information**	Information about configuration of the loop service.	Loop Service Configuration Information	See Table 40:	Required	

4.1.10.7 CPE Configuration

4.1.10.7.1CPE Configuration Request

Table 192: CPE Configuration Request

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Request Identification**	Identification of this particular request.	Request Identification	See Table 5:	Required	
2	**CPE**	Identifies a particular CPE, including model and serial number.	CPE	See Table 16:	Required	

4.1.10.7.2CPE Configuration Response

Table 193: CPE Configuration Response

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Response Identification**	Identification of this particular response.	Response Identification	See Table 6:	Required	
2	**Result Attributes**					
2.1	Result Type	Defines the result and subsequent action.	enumeration	Valid values are defined in Section 5.4.	Required	
2.2	Order Result Code	Various vendors will provide current values. Can be either error or success, which might even indicate that an appointment was scheduled--i.e. multiple success results possible.	alpha/ numeric	1-40 chars Example values are defined in Section 5.8.	Required	
2.3	Description	A textual description of the status result.	free-form text	1-150 characters	Optional	
3	**Success Attributes**				Conditional	Required if Result Type indicates success.
3.1	CPE	Identifies a particular CPE, including model and serial number.	CPE	See Table 16:	Required	
3.2	CPE Configuration Information	Information about configuration of the CPE.	CPE Configuration Information	See Table 41:	Required	

4.1.10.7.3CPE Change Notification

Table 194: CPE Change Notification

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
1	**Notification Identification**	Identifies the originator of this notification.	Notification Identification	See Table 7:	Required	

Table 194: CPE Change Notification (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
2	**CPE**	Identifies a particular CPE, including model and serial number.	CPE	See Table 16:	Required	
3	**CPE Configuration Information**	Information about configuration of the CPE.	CPE Configuration Information	See Table 41:	Required	

4.1.11 End User Move Scenarios

We are not currently addressing, via flow-through, the case where the end user either wants to change Broadband Service provider or has to change Broadband Service provider because they are moving. If the Broadband Service provider changes, then the end-user must initiate a Delete Broadband Service Request with old provider, followed by a New Broadband Service Request with new provider.

The following case is addressed:

- End user is moving - wants to retain same Broadband Service Provider. What does the Broadband Service Provider need to do to accomplish the move? The scenarios below address this case.

For each scenario, the list of interactions needed to accomplish the scenario are identified, including the Prequalification interactions. Some interactions are optional - those are indicated.

1. End-user moves to a different location within the same CO

- Determine Available Loop Service
- Change Loop (involves a physical movement within the CO, as the end user is serviced from a different loop than they were previously being serviced from. The loop provider accomplishes this via a Move activity.)
- Determine Available Physical DSL Service
- Change Physical DSL Service (OPTIONAL) (upgrade/downgrade of speed, dslam port moves)
- Disconnect Installation (OPTIONAL)
- Order Installation (OPTIONAL)
- Disconnect CPE (OPTIONAL)
- Determine Compatible CPE
- Order CPE (OPTIONAL)

2. End-user moves to a different CO - same loop provider

- Determine Available Loop Service

- Change Loop (involves a physical movement from one CO to another CO, as the end user is serviced from a different loop than they were previously being serviced from. The loop provider accomplishes this via a Move activity? Or is a loop move only for loops within the same CO?)
- Determine Available Physical DSL Service
- Change Physical DSL Service
- Disconnect Installation (OPTIONAL)
- Order Installation (OPTIONAL)
- Disconnect CPE (OPTIONAL)
- Determine Compatible CPE
- Order CPE (OPTIONAL)

3. End-user moves to a different CO - different loop provider

- Disconnect Loop
- Determine Available Loop Service
- Order Loop
- the above loop change cannot be accomplished via a Loop Migration, as the loop is physically changing. It is two different loops, migration applies to one loop, where the loop provider is changing.
- Disconnect Installation (OPTIONAL)
- Order Installation (OPTIONAL)
- Disconnect CPE (OPTIONAL)
- Determine Compatible CPE
- Order CPE (OPTIONAL)

If Physical DSL Service provider changes

- Disconnect Physical DSL Service
- Determine Available Physical DSL Service
- Order Physical DSL Service

Otherwise

- Determine Available Physical DSL Service
- Change Physical DSL Service

If RBN Transport Service provider changes

- Disconnect RBN Transport Service
- Determine Available RBN Transport Service
- Order RBN Transport Service

Otherwise if change to RBN Transport is required

- Determine Available RBN Transport Service
- Change RBN Transport Service

If Customer Access Transport Service provider changes

- Disconnect Customer Access Transport Service
- Determine Available Customer Access Transport Service
- Order Customer Access Transport Service

Otherwise if change to Customer Access Transport is required

- Determine Available Customer Access Transport Service
- Change Customer Access Transport Service

If Network Service provider changes

- Disconnect Network Service
- Determine Available Network Service
- Order Network Service

Otherwise if change to Network Service is required

- Determine Available Network Service
- Change Network Service

The Broadband Service Move Information table is used in a Move scenario, to accomplish the necessary Change <foo Service> Request at each level.

Table 195: Broadband Service Move Information

	Field Name	Description	Data Type	Data Charac-teristics	Usage	Usage Notes
195	**Broadband Service Move Information**	The information necessary to allow the end-user to move their Broadband Service from one customer premise to another. This table contains only the information necessary to do 'Change' of service at each layer. When a move involves changing of Provider at any layer, then this involves a Delete <foo Service> Request sent to the Old Provider and an New <foo Service> Request sent to the New Provider.				
195.1	Old Address	Identifies old service address.	National Address	See Table 8:	Required	
195.2	New Address	Identifies new service address.	National Address	See Table 8:	Required	

Table 195: Broadband Service Move Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
195.3	Old TN	Identifies old telephone number.	Telephone Number	See Table 10:	Required	
195.4	New TN	Identifies new telephone number.	Telephone Number	See Table 10:	Required	
195.5	Old Broadband Service ID	Does this need to be included? The Broadband Service Provider is the only one interested in this information aren't they? The Provider isn't changing, so this is really internal provider information?	alpha/ numeric	1-40 chars	Required	
195.6	New Broadband Service ID	Does this need to be included? The Broadband Service Provider is the only one interested in this information aren't they? The Provider isn't changing, so this is really internal provider information?	alpha/ numeric	1-40 chars	Required	
195.7	Old Network Service ID	Identifies old network service.	alpha/ numeric	1-40 chars	Conditional	Only provided when Network Service Provider remains the same, and when Network Service must change.
195.8	New Network Service ID	Identifies new network service.	alpha/ numeric	1-40 chars	Conditional	Only provided when Network Service Provider remains the same, and when Network Service must change.
195.9	Old Customer Access Transport Service ID	Identifies old customer access transport service.	alpha/ numeric	1-40 chars	Conditional	Only provided when Customer Access Transport Service Provider remains the same, and when Customer Access Transport Service must change.

Table 195: Broadband Service Move Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
195.10	New Customer Access Transport Service ID	Identifies new customer access transport service.	alpha/ numeric	1-40 chars	Conditional	Only provided when Customer Access Transport Service Provider remains the same, and when Customer Access Transport Service must change.
195.11	Old RBN Transport Service ID	Identifies old service.	alpha/ numeric	1-40 chars	Conditional	Only provided when RBN Transport Service Provider remains the same, and when RBN Transport Service must change.
195.12	New RBN Transport Service ID	Identifies new service.	alpha/ numeric	1-40 chars	Conditional	Only provided when RBN Transport Service Provider remains the same, and when RBN Transport Service must change.
195.13	Old Physical DSL Service ID	Identifies old physical DSL service.	alpha/ numeric	1-40 chars	Conditional	Only provided when Physical DSL Service Provider remains the same, and when Physical DSL Service must change.
195.14	New Physical DSL Service ID	Identifies new physical DSL service.	alpha/ numeric	1-40 chars	Conditional	Only provided when Physical DSL Service Provider remains the same, and when Physical DSL Service must Change.
195.15	Old Loop Circuit ID	Identifies old loop service.	alpha/ numeric	1-40 chars	Conditional	Only provided when Loop Provider remains the same, and when Loop Service must change.

Table 195: Broadband Service Move Information (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
195.16	New Loop Circuit ID	Identifies new loop service.	alpha/ numeric	1-40 chars	Conditional	Only provided when Loop Provider remains the same, and when Loop Service must change.
195.17	Disconnect Effective Date	Defines when old service should be disconnected.	Date and Time	See Table 3:	Required	
195.18	New Connect Effective Date	Defines when new service should be connected.	Date and Time	See Table 3:	Required	

Migration applies to a Service - migration of the service from one Service Provider to another. For example, loop migration involves migration of a Loop from old Loop Provider to new Loop Provider.

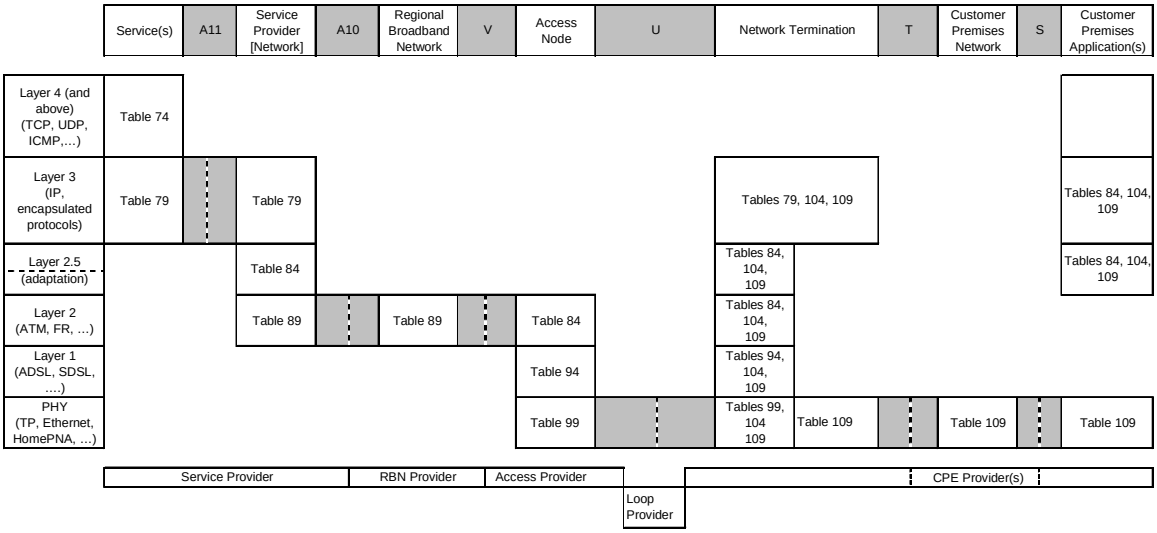
Migration does not apply to an end-user. Of course, the above migration does impact the end user and results in the end user being serviced by a new Service Provider, but it is an artifact of migration of the Service. You are not migrating the end user from one service provider to another. You are migrating the Service, and the end user is along for the ride. When the new Service Provider has to provision a service to acquire the end user this is not considered a migration.

So end user moving from one loop provider's area into another loop provider's area does not involve a migration of loop service from one loop provider to another. This entails a Move activity, where the end user moving prompts disconnect of **old** loop service from **old** loop provider, and add of **new** loop service to **new** loop provider.

4.1.12 New Service Scenario

In order to illustrate the data necessary to configure the network layers, the network diagram from TR-038 is included below, with references to the Tables in this document which contain the data elements necessary to configure each layer at each interface.

Note that tables are cumulative, not independent, when exchanging information between service providers.


Service(s)
A11
Service Provider [Network]
A10
Regional Broadband Network
V
Access Node
U
Network Termination
T
Customer Premises Network
S
Customer Premises Application(s)
Layer 4 (and above) (TCP, UDP, ICMP,…)
Table 74
Layer 3 (IP, encapsulated protocols)
Table 79
Table 79
Tables 79, 104, 109
Tables 84, 104, 109
Layer 2.5 (adaptation)
Table 84
Tables 84, 104, 109
Tables 84, 104, 109
Layer 2 (ATM, FR, …)
Table 89
Table 89
Table 84
Tables 84, 104, 109
Layer 1 (ADSL, SDSL, ….)
Table 94
Tables 94, 104, 109
PHY (TP, Ethernet, HomePNA, …)
Table 99
Tables 99, 104 109
Table 109
Table 109
Table 109
Service Provider
RBN Provider
Access Provider
CPE Provider(s)
Loop Provider

5. Data Model Management

This Section addresses the information necessary for the management of the data model itself. Currently, this section identifies

- valid values for enumeration type data elements, and
- example values for alpha/numeric type data elements where it is considered useful ot provide a list of example valid values

For each enumeration type data element, an attempt has been made to define all valid values, or to identify other standards bodies where valid values for the particular data element are maintained.

The DSL Forum does not have the sanction, nor the desire, to maintain the valid values for enumeration type data elements. When these enumerations require extension, some other standards body is responsible for maintaining the valid values.

5.1 Service Fulfillment Request Types

Valid values are:

- Pre-Order
- Prequalification
- New Service
- Modify Pending Order
- Cancel Order
- Change Service
- Disconnect Service
- Suspend Service
- Resume Service
- Service Configuration

5.2 Service Fulfillment Response Types

Valid values are:

- Pre-Order
- Prequalification
- New Service
- Modify Pending Order
- Cancel Order
- Change Service
- Disconnect Service
- Suspend Service
- Resume Service

- Service Configuration

5.3 Service Fulfillment Notification Types

Valid values are:

- Pre-Order
- Prequalification
- New Service
- Modify Pending Order
- Cancel Order
- Change Service
- Disconnect Service
- Suspend Service
- Resume Service
- Service Configuration

5.4 Result Type

The valid values for Result Type are:

- success - the request was processed successfully.
- failure - the request could not be processed due to a problem on the recipient's side. This doesn't mean the request was valid, just that it couldn't be processed even to determine if it is valid. The request should be resubmitted.
- error - the request could not be processed due to an error in the request. The request should be corrected and resubmitted.

5.5 Service Location Result Code

Example values for Service Location Result Code are:

5.5.1 Success Codes

Example values are:

- Success, Address Validated
- Success, Address Alternatives

5.5.2 Failure Codes

Example values are:

- No Permission
- Failure, No Match

5.5.3 Error Codes

Example values are:

- System Error

5.6 Loop Provider Result Code

Example values for Loop Provider Result Code are:

5.6.1 Success Codes

Example values are:

- Success, Loop Provider Identified

5.6.2 Failure Codes

Example values are:

- No Permission
- Unable to Determine Loop Provider

5.6.3 Error Codes

Example values are:

- System Error

5.7 Prequalification Result Code

Example values for Prequalification Result Code are:

5.7.1 Success Codes

Input is correct and the service can be provided

- OK – Site Qualified For Service

5.7.2 Failure Codes

Input is correct, but service can not be provided

- Site Not Qualified
- CO Not Accepting Orders Now
- CO Not Planned
- Service Constraints Not Met
- ISP Not Set Up for Service
- Suspended Account
- Class of Service Not Eligible for DSL
- Line In Hunt Group

5.7.3 Error Codes

Need additional / corrected input from the requestor

- Address Not Found
- Missing Information in Request
- Multiple Matching Addresses Found
- CO Not Identified

- CO Not Verified
- Phone Not Found
- Loop Circuit ID Not Found
- Account Has Different Premise Address
- Non-working Phone Number
- Information Invalid

5.8 Order Result Code

Example values for Order Result Code are:

5.8.1 Success Codes

Example values are:

- Success
- Order Accepted for Processing

5.8.2 Failure Codes

Example values are:

- No Permission
- Existing DSL Service With Same ISP
- Existing DSL Service With Different ISP
- Order Pending With Same ISP
- Order Pending With Different ISP

5.8.3 Error Codes

Example values are:

- System Error
- Invalid Due Date

5.9 Status Result Code

Example values for Status Result Code are:

5.9.1 Success Codes

Example values are:

- Success

5.9.2 Failure Codes

Example values are:

- No Permission

5.9.3 Error Codes

Example values are:

- System Error

5.10 Telephone Number Type

Example values are:

- residence (a land-line or cellular telephone number; may include an extension number)
- pager (may include a PIN number)
- fax
- business
- mobile
- TTY/TDD

5.11 CPE Type

Example values are:

- DSL Modem
- Router
- DSU
- filter
- splitter
- bridge
- IAD
- firewall

5.12 Cancel Reason Code

5.12.1 Customer Initiated Cancellation

Example values are:

- Service no longer needed
- Relocating
- Switched ISP
- Do not wish to downgrade
- Not informed of inside wiring date
- Not informed of outside wiring date
- Equipment not delivered
- Service ordered not available
- Service not available by requested date/time
- no reason given

5.12.2 Service Provider Initiated Cancellation

Example values are:

- Duplicate order
- No service available
- Service ordered not available
- Equipment not delivered

5.12.3 Access Provider Initiated Cancellation

Example values are:

- Capacity not available
- No ILEC facilities
- Service ordered not available
- Disturber in Binder Group
- Contract Expired
- Customer Type Not in Contract

5.12.4 Loop Provider Initiated Cancellation

Example values are:

- Electronics on line: load coils, disturbers, repeaters, bridge taps
- dB loss of loop too great
- Trenching required
- Digital Loop Carrier not supported
- Loop too long
- Equipment not delivered
- Facility not available
- Service ordered not available
- Disturber in Binder Group
- Contract Expired
- Customer Type Not in Contract

5.13 Suspend Reason Code

5.13.1 Customer Initiated Suspend

Example values are:

- no reason given
- seasonal suspension
- vacation hold

5.13.2 Service Provider Initiated Suspend

Example values are:

- no reason given
- seasonal suspension
- non-payment
- vacation hold

5.13.3 Access Provider Initiated Suspend

Example values are:

- no reason given
- seasonal suspension
- Vacation Hold
- non-payment

5.13.4 Loop Provider Initiated Suspend

Example values are:

- no reason given
- seasonal suspension
- Vacation Hold
- non-payment

5.14 Resume Reason Code

5.14.1 Customer Initiated Resume

Example values are:

- customer requested
- no reason given

5.14.2 Service Provider Initiated Resume

Example values are:

- customer requested
- no reason given

5.14.3 Access Provider Initiated Resume

Example values are:

- customer requested
- no reason given

5.14.4 Loop Provider Initiated Resume

Example values are:

- customer requested
- no reason given

5.15 Day of Week

Valid values are:

- any
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday
- weekends
- weekdays
- holidays

5.16 VC Type

Valid values are:

- aggregate
- individual

5.17 Bus Type

Valid values are:

- PCMCIA
- PCI
- S-100
- S-100/IEEE-696
- ISA
- MSA
- EISA
- Local Bus
- VL Bus
- Peripheral Bus
- SCSI
- IDE

- Microchannel

5.18 Port Type

Valid values are:

- USB
- Ethernet
- ATM
- ATM-25
- Token Ring (802.5)
- Local Talk
- Raw ARCNET (ARCNET encapsulated in Ethernet)
- ARCNET 878.2
- WAN (point to point and WAN cards)
- Connection oriented WAN
- Wireless 802.11b
- HomeRF
- IrDA
- Home PNA
- Serial RS-232
- RS-422
- Parallel
- SCSI

5.19 Routing Type

Valid values are:

- Dynamic
- Static

5.20 Routing Protocol

Valid values are:

- RIP-1
- RIP-2
- OSPF

5.21 Disconnect Reason Code

Example values are:

- Customer Moving

- Switched DSL Provider
- Switched ISP
- Trenching Required
- Duplicate or Order Error
- ISP Requested
- Reprovisioning Required (e.g. downgrade to IDSL)
- Customer Requested
- Service Quality Issue
- Deceased
- Disaster
- Customer Non Payment
- no reason given

5.22 Provider Type

Valid values are:

- Service Provider
- Access Provider
- RBN Provider
- Loop Provider
- CPE Provider
- Field Installer
- End User Customer
- other

5.23 Country Codes

This is the ISO-3166 Alpha-2 standard set of country codes, current as of 08/21/00. For the most current updates, please refer to:

http://www.din.de/gremien/nas/nabd/iso3166ma/codlstp1/en_listp1.html

Table 196: Country Codes

Country	ISO-3166 Alpha-2
AFGHANISTAN	AF
ALBANIA	AL
ALGERIA	DZ
AMERICAN SAMOA	AS

Table 196: Country Codes (Continued)

Country	ISO-3166 Alpha-2
ANDORRA	AD
ANGOLA	AO
ANGUILLA	AI
ANTARCTICA	AQ
ANTIGUA AND BARBUDA	AG
ARGENTINA	AR
ARMENIA	AM
ARUBA	AW
ASCENSION ISLAND	AC
AUSTRALIA	AU
AUSTRIA	AT
AZERBAIJAN	AZ
BAHAMAS	BS
BAHRAIN	BH
BANGLADESH	BD
BARBADOS	BB
BELARUS	BY
BELGIUM	BE
BELIZE	BZ
BENIN	BJ
BERMUDA	BM
BHUTAN	BT
BOLIVIA	BO
BOSNIA AND HERZEGOWINA	BA
BOTSWANA	BW
BOUVET ISLAND	BV
BRAZIL	BR
BRITISH INDIAN OCEAN TERRITORY	IO
BRUNEI DARUSSALAM	BN
BULGARIA	BG
BURKINA FASO	BF
BURUNDI	BI

Table 196: Country Codes (Continued)

Country	ISO-3166 Alpha-2
CAMEROON	CM
CANADA	CA
CAPE VERDE	CV
CAYMAN ISLANDS	KY
CENTRAL AFRICAN REPUBLIC	CF
CHAD	TD
CHILE	CL
CHINA	CN
CHRISTMAS ISLAND	CX
COCOS (KEELING) ISLANDS	CC
COLOMBIA	CO
COMOROS	KM
CONGO	CG
CONGO - THE DEMOCRATIC REPUBLIC OF THE	CD
COOK ISLANDS	CK
COSTA RICA	CR
COTE D'IVOIRE	CI
CROATIA (local name: Hrvatska)	HR
CUBA	CU
CYPRUS	CY
CZECH REPUBLIC	CZ
DENMARK	DK
DJIBOUTI	DJ
DOMINICA	DM
DOMINICAN REPUBLIC	DO
EAST TIMOR	TP
ECUADOR	EC
EGYPT	EG
EL SALVADOR	SV
EQUATORIAL GUINEA	GQ
ERITREA	ER
ESTONIA	EE

Table 196: Country Codes (Continued)

Country	ISO-3166 Alpha-2
ETHIOPIA	ET
FALKLAND ISLANDS (MALVINAS)	FK
FAROE ISLANDS	FO
FIJI	FJ
FINLAND	FI
FRANCE, METROPOLITAN	FR
FRANCE	FX
FRENCH GUIANA	GF
FRENCH POLYNESIA	PF
FRENCH SOUTHERN TERRITORIES	TF
GABON	GA
GAMBIA	GM
GEORGIA	GE
GERMANY	DE
GHANA	GH
GIBRALTAR	GI
GREECE	GR
GREENLAND	GL
GRENADA	GD
GUADELOUPE	GP
GUAM	GU
GUATEMALA	GT
GUERNSEY	GG
GUINEA	GN
GUINEA-BISSAU	GW
GUYANA	GY
HAITI	HT
HEARD AND MC DONALD ISLANDS	HM
HOLY SEE (VATICAN CITY STATE)	VA
HONDURAS	HN
HONG KONG	HK
HUNGARY	HU

Table 196: Country Codes (Continued)

Country	ISO-3166 Alpha-2
ICELAND	IS
INDIA	IN
INDONESIA	ID
IRAN (ISLAMIC REPUBLIC OF)	IR
IRAQ	IQ
IRELAND	IE
ISLE OF MAN	IM
ISRAEL	IL
ITALY	IT
JAMAICA	JM
JAPAN	JP
JERSEY	JE
JORDAN	JO
KAMPUCHEA	KH
KAZAKHSTAN	KZ
KENYA	KE
KIRIBATI	KI
KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF	KP
KOREA, REPUBLIC OF	KR
KUWAIT	KW
KYRGYZSTAN	KG
LAO PEOPLE'S DEMOCRATIC REPUBLIC	LA
LATVIA	LV
LEBANON	LB
LESOTHO	LS
LIBERIA	LR
LIBYAN ARAB JAMAHIRIYA	LY
LIECHTENSTEIN	LI
LITHUANIA	LT
LUXEMBOURG	LU
MACAU	MO
MACEDONIA, THE FORMER YUGOSLAV REPUBLIC	MK

Table 196: Country Codes (Continued)

Country	ISO-3166 Alpha-2
MADAGASCAR	MG
MALAWI	MW
MALAYSIA	MY
MALDIVES	MV
MALI	ML
MALTA	MT
MARSHALL ISLANDS	MH
MARTINIQUE	MQ
MAURITANIA	MR
MAURITIUS	MU
MAYOTTE	YT
MEXICO	MX
MICRONESIA, FEDERATED STATES OF	FM
MOLDOVA, REPUBLIC OF	MD
MONACO	MC
MONGOLIA	MN
MONTSERRAT	MS
MOROCCO	MA
MOZAMBIQUE	MZ
MYANMAR	MM
NAMIBIA	NA
NAURU	NR
NEPAL	NP
NETHERLANDS	NL
NETHERLANDS ANTILLES	AN
NEW CALEDONIA	NC
NEW ZEALAND	NZ
NICARAGUA	NI
NIGER	NE
NIGERIA	NG
NIUE	NU
NORFOLK ISLAND	NF

Table 196: Country Codes (Continued)

Country	ISO-3166 Alpha-2
NORTHERN MARIANA ISLANDS	MP
NORWAY	NO
OMAN	OM
PAKISTAN	PK
PALAU	PW
PALESTINIAN TERRITORIES	PS
PANAMA	PA
PAPUA NEW GUINEA	PG
PARAGUAY	PY
PERU	PE
PHILIPPINES	PH
PITCAIRN	PN
POLAND	PL
PORTUGAL	PT
PUERTO RICO	PR
QATAR	QA
REUNION	RE
ROMANIA	RO
RUSSIAN FEDERATION	RU
RWANDA	RW
SAINT KITTS AND NEVIS	KN
SAINT LUCIA	LC
SAINT VINCENT AND THE GRENADINES	VC
SAMOA	WS
SAN MARINO	SM
SAO TOME AND PRINCIPE	ST
SAUDI ARABIA	SA
SENEGAL	SN
SEYCHELLES	SC
SIERRA LEONE	SL
SINGAPORE	SG
SLOVAKIA (Slovak Republic)	SK

Table 196: Country Codes (Continued)

Country	ISO-3166 Alpha-2
SLOVENIA	SI
SOLOMON ISLANDS	SB
SOMALIA	SO
SOUTH AFRICA	ZA
SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS	GS
SPAIN	ES
SRI LANKA	LK
ST. HELENA	SH
ST. PIERRE AND MIQUELON	PM
SUDAN	SD
SURINAME	SR
SVALBARD AND JAN MAYEN ISLANDS	SJ
SWAZILAND	SZ
SWEDEN	SE
SWITZERLAND	CH
SYRIAN ARAB REPUBLIC	SY
TAIWAN, PROVINCE OF CHINA	TW
TAJIKISTAN	TJ
TANZANIA, UNITED REPUBLIC OF	TZ
THAILAND	TH
TOGO	TG
TOKELAU	TK
TONGA	TO
TRINIDAD AND TOBAGO	TT
TUNISIA	TN
TURKEY	TR
TURKMENISTAN	TM
TURKS AND CAICOS ISLANDS	TC
TUVALU	TV
UGANDA	UG
UKRAINE	UA
UNITED ARAB EMIRATES	AE

Table 196: Country Codes (Continued)

Country	ISO-3166 Alpha-2
UNITED KINGDOM	GB
UNITED STATES	US
UNITED STATES MINOR OUTLYING ISLANDS	UM
URUGUAY	UY
UZBEKISTAN	UZ
VANUATU	VU
VENEZUELA	VE
VIET NAM	VN
VIRGIN ISLANDS (BRITISH)	VG
VIRGIN ISLANDS (U.S.)	VI
WALLIS AND FUTUNA ISLANDS	WF
WESTERN SAHARA	EH
WESTERN SAMOA	WS
YEMEN	YE
YUGOSLAVIA	YU
ZAMBIA	ZM
ZIMBABWE	ZW

There is also a United Nations Alpha-3 standard, a United Nations numerical standard and a CCITT numerical standard.

5.24 Operational Status

Example values are:

- Operational
- Planned
- Committed
- Not Planned
- Pending

5.25 Inside Wiring Responsibility

Example values are:

- Building Manager
- Union Worker
- Customer

- None

5.26 OS Type

Valid values are:

- Win95
- Win98
- WinNT
- Win2000
- Win3.1
- WinXP
- Linux-Unix
- WinME
- MacOS 8
- MacOS 9
- MacOS X

5.27 OS License Type

Example values are:

- workstation
- server

5.28 Computer Type

Valid values are:

- desktop
- laptop

5.29 NID Location

Example values are:

- Basement
- Backyard
- Downstairs Closet

5.30 Building Type

Example values are:

- high-rise
- MDU
- MTU

5.31 Cost Unit

A list of global currencies and the three-character currency code generally used to represent each currency are at:

http://www.xe.com/iso4217.htm

Often, but not always, this code is the same as the ISO 4217 standard. In most cases, the ISO 4217 currency code is composed of the country's two-character ISO 3166 country code plus an extra character to denote the currency unit. For example, the code for Canadian Dollars is simply Canada's two-character ISO 3166 code (“CA”) plus a one-character currency designator (“D”).

5.32 Constraint Type

Example values are:

- CPE Make and Model
- Service type
- Minimum speeds
- Price
- availability date
- SLA
- Existing service on line

5.33 Networking Type

Valid values are:

- IP
- IP with NAT

5.34 Timezone

Sources include:

http://time.greenwich2000.com/info/timezone.htm

http://aa.usno.navy.mil/faq/docs/world_tzones.html

http://swissinfo.net/cgi/worldtime

http://tycho.usno.navy.mil/timezones.html

Valid values are defined in the following table.

Table 197: Timezone Valid Values

Valid Value	Civilian Time Zones	Cities
GMT +0000	GMT = Greenwich Mean UT or UTC = Universal (Coordinated) WET = Western European	London, England Dublin, Ireland Edinburgh, Scotland Lisbon, Portugal Reykjavik, Iceland Casablanca, Morocco

Table 197: Timezone Valid Values

Valid Value	Civilian Time Zones	Cities
GMT +0100	FWT - French Winter MET - Middle European MEWT - Middle European Winter SWT - Swedish Winter.	Paris, France Berlin, Germany Amsterdam, The Netherlands Brussels, Belgium Vienna, Austria Madrid, Spain Rome, Italy Bern, Switzerland Stockholm, Sweden Oslo, Norway
GMT +0200	EET - Eastern European, Russia Zone 1	Athens, Greece Helsinki, Finland Istanbul, Turkey Jerusalem, Israel Harare, Zimbabwe
GMT +0300	BT - Baghdad, Russia Zone 2	Kuwait Nairobi, Kenya Riyadh, Saudi Arabia Moscow, Russia
GMT +0330		Tehran, Iran
GMT +0400	ZP4 - Russia Zone 3	Abu Dhabi, UAE Muscat Tblisi Volgograd Kabul
GMT +0430		Afhganistan
GMT +0500	ZP5 - Chesapeake Bay	
GMT +0530		Andaman Islands Nicobar Islands India
GMT +545		Nepal
GMT +0600	ZP6 - Chesapeake Bay	
GMT +0630		Cocos or Keeling Island Myanmar
GMT +0700	WAST - West Australian Standard	
GMT +0800	CCT - China Coast, Russia Zone 7	Western Australia
GMT +0900	JST - Japan Standard, Russia Zone 8	
GMT +0930		Northern Territory, Australia
GMT +1000	GST - Guam Standard, Russia Zone 9	Queensland, Australia
GMT +1030		Lord Howe Island South Australia

Table 197: Timezone Valid Values

Valid Value	Civilian Time Zones	Cities
GMT +1100		New South Wales, Australia Victoria, Australia Tasmania
GMT +1130		Norfolk Island
GMT +1200	IDLE - International Date Line East NZST - New Zealand Standard NZT - New Zealand	Wellington, New Zealand Fiji Marshall Islands
GMT +1245		Chatham Island, New Zealand
GMT -0100	WAT - West Africa	
GMT -0200	AT - Azores	
GMT -0300		
GMT -0330		Newfoundland
GMT -0400	AST - Atlantic Standard	
GMT -0500	EST - Eastern Standard	
GMT -0600	CST - Central Standard	
GMT -0700	MST - Mountain Standard	
GMT -0800	PST - Pacific Standard	
GMT -0830		
GMT -0900	YST - Yukon Standard	
GMT -0930		Marquesas Islands
GMT -1000	AHST - Alaska-Hawaii Standard CAT - Central Alaska HST - Hawaii Standard EAST - East Australian Standard	
GMT -1100	NT - Nome	
GMT -1200	IDLW - International Date Line West	

5.35 Address Format

Valid values are:

- Parsed
- Free Form

5.36 Trading Partner Identification Code Type

The Dunn and Bradstreet codes are used to identify trading partners in Requests, Responses and Notifications. This is a world-wide code set for identifying trading partners.

Valid values are:

- Dunn and Bradstreet
- CIC
- Customer

5.37 Encapsulation

Valid values are:

- LLC
- none
- AAL2
- AAL5

5.38 Internet Service

Example values are:

- Browser Home Page
- Browser Favorite
- Email
- USENET News
- Personal Web Page

5.39 Client Protocol

Valid values are:

- PPP
- DHCP
- IPCP
- L2TP
- PPTP
- IPSEC

5.40 Access Protocol

Example values are:

- Ethernet
- IP
- PPPoA
- IP over Ethernet (IPoE)
- PPP over Ethernet (PPPoE)
- Routed IPX

- L2TP
- Arbitrary E'type/ATM

5.41 Packet Protocol

Example values are:

- TCP
- UDP
- ICMP
- HTTP
- SMTP
- SNMP
- POP3
- HTTPS
- FTP
- Telnet
- DNS
- TFTP
- IMAP4
- NTP
- NNTP
- LDAP
- MS Net Meeting
- H.323 Host Call
- MS NetShow
- MSN Messenger
- AOL ICQ
- AOL
- RTP
- Quake
- DirectX Gaming

5.42 Firewall Action

Example values are:

- log

5.43 Central Office Capacity Constraint

Example values are:

- No Virtual Paths Available to New DSLAM
- No DSLAM Ports Available
- New DSLAM Required
- No VCC Available into VPC

5.44 Install Type

Example values are:

- residence
- business
- SOHO
- teleworker

5.45 Recurring Basis

Valid values are:

- Kbyte
- Mbyte
- Gbyte
- Hour
- Day
- Week
- Month
- Quarter
- Year

6. Glossary and References

6.1 Terms, Acronyms and Terminology

6.1.1 Data Element

A single, atomic piece of information contained in a request or response.

6.1.2 Data Structure

A logical grouping of data elements. For example, a Service Address is a data structure which consists of a number of data elements.

6.1.3 Requestor

The operational entity which sends the request message.

6.1.4 Responder

The operational entity which is the target of the request message. The Responder issues the response message and any associated notification messages.

6.1.5 End User

The entity for whom service is being ordered.

6.1.6 Ordering and Billing Forum (OBF)

A Forum within the Carrier Liaison Committee of ATIS. The OBF provides a forum for customers and providers in the telecommunications industry to identify, discuss and resolve national issues which affect ordering, billing, provisioning and exchange of information about access services, other connectivity and related matters.

6.1.7 Alliance for Telecommunications Industry Solutions (ATIS)

ATIS was established at the divestiture of the Bell System in 1984. As industry competition grew and new technologies developed, the role of ATIS expanded. Today, ATIS is one of the world's leading standards development bodies for telecommunications, dedicating itself to the following mission statement:

"The Alliance for Telecommunications Industry Solutions will actively promote the timely resolution of national and international issues involving telecommunications standards and the development of operational guidelines."

"ATIS will initiate and maintain flexible, open industry forums to address technical and operational issues affecting the nation's telecommunications facilities and services and the development of innovative technologies."

http://www.atis.org

6.1.8 Broadband Network Termination (B-NT)

A generic term for network termination equipment located at the end-user customer's premise. In particular, only DSL B-NT equipment is considered. The B-NT is the functional element that exists between the U and S interfaces at the customer premises. See TR-017 (Reference [8], page 188) for the DSL Forum reference model.

In this document, the term Customer Premise Equipment (CPE) is used to refer to the DSL B-NT equipment.

6.2 References

[1] DSL Forum TR-025, Core Network Architecture for Access to Legacy Data Network over ADSL, November 1999.

[2] DSL Forum TR-038, DSL Service Flow-Thru Fulfillment Management Overview, March 2001.

[3] Local Service Ordering Guidelines (LSOG) Issue 5, dated August 2000.

[4] ISO 3166, Alpha-2 standard set of Country Codes.

[5] ITU-T E.164 standard definition for Geographic Area.

[6] RFC2662, Definitions of Managed Objects for the ADSL Lines, Copyright (C) The Internet Society (1999). All Rights Reserved.

[7] RFC2515, Definitions of Managed Objects for ATM Management, Copyright (C) The Internet Society (1999). All Rights Reserved.

[8] DSL Forum TR-017, ATM over ADSL Recommendation, March 1999.

[9] IEEE 802.1d, ISO/IEC 15802-3:1998, Telecommunications and information exchange between systems--Local and metropolitan area networks--Common Specifications--Media access control (MAC) bridges

[10] RFC2453, STD 56, Routing Internet Protocol (RIP) Version 2, Copyright (C) The Internet Society (1999). All Rights Reserved.

[11] RFC2328, STD 54, Open Shortest Path First (OSPF) Version 2, Copyright (C) The Internet Society (1999). All Rights Reserved.

[12] RFC2373, IP Version 6 Addressing Architecture, Copyright (C) The Internet Society (1998). All Rights Reserved.

[13] ATM Forum ILMI Specification (af-ilmi-0065.000)

[14] ATM Forum Auto-configuration of PVCs Specification (af-nm-0122.000)

[15] ATM Forum Addendum to ILMI Auto-configuration Extension (fb-nm-0165.000)

7. Protocol Specific Interaction Model

In Requests, we do not reflect any grouping - that is a protocol issue. For example although a request sent to an operational entity may consist of subrequests (multiple logical requests may be grouped together and sent to the trading partner in a 'batch'), in this model, only the data needed for one logical request is defined.

Lists may still be required in requests. For example, a list of services available at a specific address is part of a qualification response. However, the protocol independent model does not model things like qualifying multiple service addresses within a single request. This is considered part of the protocol specific model.

Appendix A. National Tables

The tables in this Appendix represent differences between various countries and/or regions in the formatting of some of the Complex Base Data Types.

Currently the Complex Base Data Types which are defined on a per country/regional basis are:

- Parsed Address
- Central Office
- Loop Characteristics
- ATUC Termination
- Loop Service

Each of the above has a "National <Complex Base Data Type>" defined in the main text of this document. The National data type indicates the format of the data, and then a pointer to one of the data types contained here.

Taking Parsed Address as an example, the data elements which comprise a Parsed Address differ between countries. The interactions defined in the main text of this document refer to a "National Parsed Address". A National Parsed Address has a data element which indicates the format of the Parsed Address - i.e., a regional/country reference - and then the data elements which comprise a Parsed Address for that region/country. The data elements which define Parsed Address for each region/country are defined here in the Appendix. The Appendix currently contains data elements for those countries where we were able to obtain the information. It is expected that this Appendix can be expanded as information about each country is obtained, while the interactions in the main document can remain stable.

While a normalized set of Complex Base Data Type *names* is used, no attempt has been made to normalize data element *names* amongst the various countries and nations.

For example, we use the term "Central Office" to refer to the equipment from which a loop is served. In Britain this is referred to as a "Serving Exchange". So, we have a Complex Base Data Type defined in this Appendix for a "UK Central Office". This allows us to maintain consistency within the main text of the document.

So while the Complex Base Data Type is called "UK Central Office", the data elements within the "UK Central Office" data type are those terms used in the UK.

A.1 Parsed Address

Table 198: United States Parsed Address

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
198	**United States Parsed Address**	This is based on the OBF definition in LSOG 5.[a] An example of a parsed address is as follows: 25W 450 1/2 SW Camino Ramon Lane NW, Floor 12, Wing 2, Suite 23A In parsed address format, the above address fields break out to the following: SAPR=25W SANO=450 SASF=1/2 SASD=SW SASN=Camino Ramon SATH=LN SASS=NW LD1=FL LV1=12 LD2=WING LV2=2 LD3=STE LV3=23A				
198.1	Address Format Type	Identifies the format of the address being supplied.	enumeration	Valid values are: A-rural route and/or box number B-unnumbered C-provider-assigned house number D-descriptive	Optional	A value of C indicates a valid address where no house number exists; therefore, the provider has assigned an internal house number to facilitate provisioning.
198.2	Service Address Number Prefix	Identifies the prefix for the address number of the service address.	alpha/numeric	1-6 characters	Optional	
198.3	Service Address Number	Identifies the number of the service address	alpha/numeric	1-10 characters	Optional	

Table 198: United States Parsed Address (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
198.4	Service Address Number Range	Identifies the range or end range address number when consecutive address numbers are to be provided. This field indicates the end range of address numbers when used in conjunction with SANO field. When the SANO field is not populated, this field indicates a range of address numbers.	alpha/ numeric	1-17 characters	Optional	May be used on address validation responses when alternate addresses are returned.
198.5	Service Address Number Suffix	Identifies the suffix for the address number of the service address.	alpha/ numeric	1-4 characters	Optional	
198.6	Service Address Street Directional Prefix	Identifies the street directional prefix for the service address	enumeration	Valid values are: N S E W NW SW NE SE	Optional	
198.7	Service Address Street Name	Identifies the street name of the service address. If no street name exists, this entry may be a rural route, general delivery or other description for this service location.	alpha/ numeric	1-60 characters	Required	
198.8	Service Address Street Type	Identifies the thoroughfare portion of the street name of the service address. Recommended abbreviations are contained in the United States Postal Service Publication 28, Postal Addressing Standards, Street Suffix Abbreviations.	alpha/ numeric	1-7 characters	Optional	

Table 198: United States Parsed Address (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
198.9	Service Address Street Directional Suffix	Identifies the street directional suffix for the street service address	enumeration	Valid values are: N S E W NW SW NE SE	Optional	
198.10	Location Designator 1	Identifies additional specific information related to the address (e.g., building, floor, room).	enumeration	See A.6.2 for reference to valid values.	Optional	
198.11	Location Value 1	Identifies the value associated with the first location designator of the address.	alpha/ numeric	1-10 chars.	Optional	
198.12	Location Designator 2	Identifies additional specific information related to the address (e.g., building, floor, room).	enumeration	See A.6.2 for reference to valid values.	Optional	
198.13	Location Value 2	Identifies the value associated with the second location designator of the address.	alpha/ numeric	1-10 chars.	Optional	
198.14	Location Designator 3	Identifies additional specific information related to the address (e.g., building, floor, room).	enumeration	See A.6.2 for reference to valid values.	Optional	
198.15	Location Value 3	Identifies the value associated with the third location designator of the address.	alpha/ numeric	1-10 chars.	Optional	
198.16	Address Additional Information	Identifies additional location information about the address.	alpha/ numeric	1-60 chars.	Optional	
198.17	City	Identifies the city, village, or township, etc.	alpha/ numeric	1-32 chars.	Required	
198.18	State	Identifies the abbreviation for the state.	enumeration	See A.6.1 for reference to valid values.	Required	

Table 198: United States Parsed Address (Continued)

	Field Name	Description	Data Type	Data Charac-teristics	Usage	Usage Notes
198.19	ZIP/Postal Code	Identifies the ZIP code, ZIP code + extension, or postal code. Since this is U.S. (North American) only, this is required.	alpha/ numeric	1-12 chars.	Required	
198.20	Listed Address Locality	Identifies the locality or community to be listed.	alpha/ numeric	1-32 chars.	Optional	This field may be returned when it is different from the CITY field.
198.21	Foreign Town-ship	Identifies the section of a directory or a separate directory when a cus-tomer's telephone number is serviced our of another exchange.	alpha/ numeric	4 chars.	Optional	
198.22	Latitude	Identifies the latitude of the service address.	decimal	1-11 chars	Optional	
198.23	Longitude	Identifies the longitude of the service address.	decimal	1-11 chars	Optional	

a. Fields 198.1 through 198.21 come from the Local Service Ordering Guidelines (LSOG) Issue 5, End User Information Form Preparation Guide (072) and Pre-Order Process (POP) Transaction Guide (120).

Table 199: UK Parsed Address

	Field Name	Description	Data Type	Data Charac-teristics	Usage	Usage Notes
199	**UK Parsed Address**					
199.1	Sub premises			1-28 chars	Optional	

Table 199: UK Parsed Address

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
199.2	Premises Name			1-45 chars	Conditional	Either Premises Name or Thoroughfare Number must be provided
199.3	Thoroughfare Number		alpha/ numeric	1-6 chars	Conditional	Either Premises Name or Thoroughfare Number must be provided
199.4	Thoroughfare Name		alpha/ numeric	1-56 chars	Optional	
199.5	Locality		alpha/ numeric	1-28 chars	Optional	
199.6	Post Town		alpha/ numeric	1-28 chars	Optional	
199.7	County		alpha/ numeric	1-28 chars	Optional	
199.8	Postcode		alpha/ numeric	5-8 chars	Required	

Table 200: Australia Parsed Address

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
200	**Australia Parsed Address**	An example of a parsed address is as follows: Block 412, Unit 2, Kampong, Christmas Island 6798 In parsed address format, the above address fields break out to the following: Additional Information: B412 Sub Address Type: Unit Sub Address Number: 2 Street Name: Kampong Locality: Christmas Island Postcode: 6798				
200.1	Additional Address information					

Table 200: Australia Parsed Address (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
200.2	Sub Address Type					
200.3	Sub Address Number					
200.4	Street Number					
200.5	Street Number Suffix					
200.6	Street Name					
200.7	Street Type					
200.8	Street Suffix					
200.9	Locality Abbreviation					
200.10	Post Code					

A.2 Central Office

Table 201: United States Central Office

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
201	**United States Central Office**					
201.1	Address		Free-Form Address	See Table 9:	Optional	
201.2	Operational Status	Defines the current operational status of the central office.	alpha/ numeric	1-40 chars Example values are defined in Section 5.24.	Required	
201.3	Central Office Code	In North America, this is the 8 character Common Language Location Identifier (CLLI) code of the central office.	alpha/ numeric	8 chars	Required	
201.4	Accepting Orders	The date that orders are being accepted for this CO.	Date	See Table 1:	Optional	

Table 201: United States Central Office (Continued)

	Field Name	Description	Data Type	Data Charac-teristics	Usage	Usage Notes
201.5	Expected Activation	The date when the Central Office is being activated. How useful is this? Having the 'Accepting Orders' date seems to be sufficient.	Date	See Table 1:	Optional	

Table 202: UK Central Office

	Field Name	Description	Data Type	Data Charac-teristics	Usage	Usage Notes
202	**UK Central Office**					
202.1	1141 Code					
202.2	Grid Reference					
202.3	Full Name					
202.4	Code Type					
202.5	Fibre Indicator					
202.6	Node Number					
202.7	District					
202.8	Station Note					
202.9	ASCE Name					
202.10	Exchange Type					
202.11	STD Code					

A.3 Loop Characteristics

Table 203: United States Loop Characteristics

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
203	**United States Loop Characteristics**	Fields 203.1 through 203.32 come from the Local Service Ordering Guidelines (LSOG) Issue 5, Pre-Order Process (POP) Transaction Guide (120).				
203.1	AFT	Address Format Type.	enumeration	Valid values are: - Rural route and/or box number, - Unnumbered, - Provider assigned house number, Descriptive	Optional	
203.2	Parsed Address	The end user's service address.	US Parsed Address	See Table 198:	Required	
203.3	AVD	Available Date. Identifies the date the pending service/feature is expected to be available.	Date	See Table 1:	Optional	
203.4	BTQ	Bridge Tap Quantity. The number of bridge taps on the line. Indicates the number of times the following two fields repeat.	integer		Optional	
203.5	BTL	Bridge Tap Location. Identifies location of bridge tap on the loop from end user's location to the wire center. Value includes length and unit of measture.	alpha/ numeric	1-11 chars	Conditional	Present if BTQ is greater than 0, repeating for the number of times indicated by BTQ.
203.6	BTLEN	Bridge Tap Length. Identifies the length of bridge tap associated with the loop from the end user location to the wire center.	alpha/ numeric	1-11 chars	Conditional	Present if BTQ is greater than 0, repeating for the number of times indicated by BTQ.

Table 203: United States Loop Characteristics (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
203.7	DLCTYPE	DLC Type. Identifies the type of Digital Loop Carrier on the loop.	alpha/ numeric	1-20 chars	Optional	
203.8	DSSCP	DSSC Presence. Identifies the presence of Digital Single Subscriber Carrier on the loop.	enumeration	Valid values are: -actual -estimated	Optional	
203.9	ELL	Equivalent Loop Length. Identifies the 26 gauge equivalent loop length for the total distance from the end user location to the wire center. Value includes unit of measure.	alpha/ numeric	1-11 chars	Optional	
203.10	F1DL	F1 Disturber Location. May repeat. Identifies the proximity of the disturber within the feeder facility or facilities.	enumeration	Valid values are: -Adjacent binder group -Same binder group	Optional	
203.11	F1DT	F1 Disturber Type. May repeat. Identifies the type of disturber present in the feeder facility or facilities.	enumeration	Valid values are: -HDSL -IDSN -DS1 -ADSL -HDSL2	Optional	
203.12	F1LPCP	F1 Loop Composition. Identifies the composition of the loop material (serving technology type) of the feeder facility or facilities.	enumeration	Valid values are: -Coaxial -Copper -Fiber	Optional	
203.13	F2DL	F2 Disturber Location. May repeat. Identifies the proximity of the disturber within the distribution facility or facilities.	enumeration	Valid values are: -Adjacent binder group -Same binder group	Optional	
203.14	F2DT	F2 Disturber Type. May repeat. Identifies the type of disturber present in the distribution facility or facilities.	enumeration	Valid values are: -HDSL -IDSN -DS1 -ADSL -HDSL2	Optional	

Table 203: United States Loop Characteristics (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
203.15	F2LPCP	F2 Loop Composition. Identifies the composition of the loop material (serving technology type) of the distribution facility or facilities.	enumeration	Valid values are: -Coaxial -Copper -Fiber	Optional	
203.16	ILD	Insertion Loss in Decibels. Identifies the amount of signal loss on the loop.	decimal	1-6 chars	Optional	
203.17	LCQ	Load Coil Quantity. Indicates the number of times the following two fields repeat.	integer	1 char	Optional	
203.18	LCL	Load Coil Location. Identifies the location of load coils from the end user location to the wire center. Value includes unit of measure.	alpha/ numeric	1-11 chars	Optional	
203.19	LCT	Load Coil Type. Identifies the type of load coil(s) present on the loop. Position 1 represents the load coil spacing for loaded cables in feet. Positions 2-5 represent a variable length code that represents load coil inductance in millihenries for loaded cable. Values for Load Coil Spacing and Load Coil Inductance Codes are outlined in Telcordia Technologies practice BR 795-450-201.	alpha/ numeric	2-5 chars	Optional	
203.20	LL	Loop Length. Identifies the distance from the end user location to the wire center. Value includes unit of measurement.	alpha/ numeric	1-11 chars	Optional	
203.21	LLT	Loop Length Type. Identifies the process used to determine the loop length.	enumeration	Valid values are: Actual Estimated Electrical	Conditional	Optional if LL is populated, otherwise prohibited.

Table 203: United States Loop Characteristics (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
203.22	LLG	Loop Length by Gauge. May repeat. Identifies the segment loop length(s) by gauge for the total distance from the end-user location to the wire center. Value includes gauge, length and unit of measurement for length.	alpha/ numeric	1-14 chars	Optional	
203.23	LOOPSTAT	Loop Status. May repeat. Identifies the status of the loop qualification.	enumeration	See LSOG 5 for valid values.	Optional	
203.24	LPAC	Loop Product Available Code. Identifies which products are available for resale based on the loop length.	alpha/ numeric	1-5 chars	Optional	
203.25	LSA	Loop Speeds Available. Identifies the specific upstream/downstream xDSL speeds that are available.	alpha/ numeric	1-50 chars	Optional	
203.26	LST	Local Service Termination. Identifies the CLLI code of the end office switch from which service is being provided.	alpha/ numeric	11 chars	Optional	
203.27	NPA/NXX	NPA/NXX. Identifies a specific NPA/NXX within the local service office.	numeric	6 chars	Optional	
203.28	PGPRES	Pair Gain/DLC Presence. Identifies the presence of pair gain/ Digital Loop Carrier on the loop. Pair gain may represent either analog loop carrier or digital loop carrier.	enumeration	Valid values are: -actual -estimated	Optional	
203.29	RSUIND	Remote Switch Unit Indicator. Identifies the loop originates from a remote switching unit.	boolean		Optional	

Table 203: United States Loop Characteristics (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
203.30	SMC	Spectrum Management Classes. Identifies the attributes the correspond to different types of xDSL technologies. SMCs represent the speed of data transmission and whether the data is transmitted in a symmetrical vs. asymmetrical manner.	enumeration	See A.6.2 for reference to valid values.	Optional	
203.31	WCN	Wire Center Name. Identifies the location where the service provider terminates subscriber outside cable plant; i.e., their local lines with the necessary testing facilities to maintain them. Usually the same location as a Class 5 central office. Any CLLI code representing the wire center name should be returned in the LST field.	alpha/ numeric	1-25 chars	Optional	
203.32	TC	Taper Code. A reference number that identifies the loop between the central office and a serving terminal.	integer	6 chars	Optional	
203.33	Actual Upstream Rate	Rate in kbps	integer	1-6 chars	Optional	
203.34	Actual Downstream Rate	Rate in kbps	integer	1-6 chars	Optional	
203.35	Potential Upstream Rate without Impairments	Rate in kbps	integer	1-6 chars	Optional	
203.36	Potential Downstream Rate without Impairments	Rate in kbps	integer	1-6 chars	Optional	
203.37	DSL Standard employed in train		enumeration	Valid values are: T1.413 G.922.1 G.922.2 etc.	Optional	
203.38	CO Device Type	Silicon vendor, product	alpha/ numeric		Optional	

Table 203: United States Loop Characteristics (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
203.39	CO Code Version	Firmware version	alpha/ numeric		Optional	
203.40	CPE Device Type	Silicon vendor, product	alpha/ numeric		Optional	
203.41	CPE Code Version	Firmware version	alpha/ numeric		Optional	
203.42	Bridge Tap Rate Reduction	Rate reduction in kbps.	integer	1-6 chars	Optional	Only present if BTQ is greater than one. May be supplied for each Bridge Tap.
203.43	Wire Gauge Calculation Confidence	% confidence	integer		Optional	
203.44	AM Disturber 1 Frequency	Frequency of disturber in kHz	integer		Optional	
203.45	AM Disturber 1 Power	Power of disturber in dBm/ Hz	integer		Optional	
203.46	AM Disturber 1 Rate Reduction	Rate reduction in Kbps	integer	1-6 chars	Optional	
203.47	AM Disturber 2 Frequency	Frequency of disturber in kHz	integer		Optional	
203.48	AM Disturber 2 Power	Power of disturber in dBm/ Hz	integer		Optional	
203.49	AM Disturber 2 Rate Reduction	Rate reduction in Kbps	integer	1-6 chars	Optional	
203.50	T1 Disturber Power	Power of disturber in dBm/ Hz	integer		Optional	
203.51	T1 Disturber Rate Reduction	Rate reduction in Kbps	integer	1-6 chars	Optional	
203.52	SDSL Disturber Power	Power of disturber in dBm/ Hz	integer		Optional	
203.53	SDSL Disturber Rate Reduction	Rate reduction in Kbps	integer	1-6 chars	Optional	
203.54	HDSL Disturber Power	Power of disturber in dBm/ Hz	integer		Optional	

Table 203: United States Loop Characteristics (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
203.55	HDSL Disturber Rate Reduction	Rate reduction in Kbps	integer	1-6 chars	Optional	
203.56	ADSL Disturber Power	Power of disturber in dBm/Hz	integer		Optional	
203.57	ADSL Disturber Rate Reduction	Rate reduction in Kbps	integer	1-6 chars	Optional	
203.58	Unknown Disturber Rate Reduction	Rate reduction in Kbps	integer	1-6 chars	Optional	
203.59	Phone Disturber Rate Reduction	Rate reduction in Kbps	integer	1-6 chars	Optional	
203.60	Alarm Disturber Rate Reduction	Rate reduction in Kbps	integer	1-6 chars	Optional	
203.61	EMI Disturber Rate Reduction	Rate reduction in Kbps	integer	1-6 chars	Optional	
203.62	HPNA Disturber Rate Reduction	Rate reduction in Kbps	integer	1-6 chars	Optional	

Table 204: Netherlands Loop Characteristics

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
204	**Netherlands Loop Characteristics**					
204.1	Line Length	Approximate length of access line.				
204.2	Resistance a to earth	Line measurement result.				
204.3	Resistance b to earth	Line measurement result.				
204.4	Resistance b to a	Line measurement result.				
204.5	Capacitance a to earth	Line measurement result.				
204.6	Capacitance b to earth	Line measurement result.				
204.7	Capacitance b to a	Line measurement result.				

Table 205: UK Loop Characteristics

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
205	**UK Loop Characteristics**					
205.1	Line Length	Line length in metres	integer		Required	
205.2	A-E Capacitance	In nF, if available.	integer		Optional	
205.3	B-E Capacitance	In nF, if available.	integer		Optional	
205.4	MPF Category		enumeration	Valid values are: S M L	Required	
205.5	Lead Time	Gives the estimated number of working days to do the network build.	integer	4 chars	Conditional	Normally only populated for Level C network build.
205.6	Network Intervention/Build Level	The value indicates which MPF provision product (with associated price) is being implicitly requested, on a firm order being entered.	enumeration	Valid values are: Standard Level A Level B Level C	Conditional	Mandatory for provision of new MDFs. Not applicable for transfers.

Table 206: Australia Loop Characteristics

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
206	**Australia Loop Characteristics**					
206.1	Loop Trace Length	The length in meters of the cable.	integer	5 chars	Required	
206.2	Loop Trace Gauge	The gauge in millimetres of the cable. e.g.: 0.32	integer	decimals allowed	Required	

Table 206: Australia Loop Characteristics (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
206.3	Loop Trace Type	Type of cable.	enumeration	Valid values are: PUIT APIUT PIQL PIQC PEIUT PEIQL PEIUQ CPIUT CPFUT PIQJ PEIQC	Required	
206.4	Tap Leg Length	The length in meters of the cable	integer	5 chars	Required	
206.5	ULL Service Number	There can be multiple Tap Legs per length e.g. 1600000001	integer	10 chars	Required	

A.4 ATUC Termination Information

Table 207: North American ATUC Termination Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
207	**North American ATUC Termination Information**					
207.1	Central Office Code	Identifies the central office where the DSLAM is located. This is the 8-character Common Language Location Identifier (CLLI) code of the central office.	alpha/ numeric	8 characters	Conditional	Required if the ATUC is located within a Central Office
207.2	DSLAM Location	The address of the DSLAM location.	National Service Address	See Table 8:	Conditional	Required in the ATUC is located outside of a central office.

Table 207: North American ATUC Termination Information

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
207.3	DSLAM ID	11 character CLLI code (ACTL or Secondary ACTL) of the DSLAM in the Central Office. ACTL and Secondary ACTL are defined in T1.253.	alpha/ numeric	11 chars	Required	
207.4	DSLAM Port ID	Identifies the particular port on the DSLAM. Format depends on DSLAM vendor.			Required	
207.5	Rack	Rack identifier	integer	1-10 chars	Required	
207.6	Shelf	Shelf identifier	integer	1-10 chars	Required	
207.7	Slot	Slot identifier	integer	1-10 chars	Required	
207.8	Sub-slot	Sub-slot identifier	integer	1-10 chars	Required	
207.9	Port Number	Port identifier	integer	1-10 chars	Required	
207.10	Technology Supported List	Identifies the technologies supported by the equipment installed in the slot. Can be more than one value.			Required	
207.11	Technology Supported	Identifies a technology supported by the equipment installed in the slot.	alpha/ numeric	1-40 chars Example values are: ISDN IDSL SDSL CAP VDSL HDSL HDSL2 T1.413 G.992.1 G.992.2 G.SHDSL	Required	

A.5 Loop Service

Table 208: United States Loop Service

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
208	**Loop Service**	The codes are used to send an unbundled loop request to an Loop Provider. This is for U.S. (or North American) locations only, based on the OBF definition in LSOG 5.[a]				

Table 208: United States Loop Service (Continued)

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
208.1	Network Channel Code	Identifies the network channel code for the circuit(s) involved. The network channel code describes the loop channel.	alpha/ numeric	4 characters	Required	
208.2	Network Channel Interface Code	Identifies the electrical conditions on the circuit at the ACTL/Primary Location.	alpha/ numeric	5-12 characters	Required	
208.3	Secondary Network Channel Interface Code	Identifies the electrical conditions on the circuit at the secondary ACTL or end-user location.	alpha/ numeric	5-12 characters	Required	

a. Fields 222.1 through 222.3 come from the Local Service Ordering Guidelines (LSOG) Issue 5, LSR Form Preparation Guide (071).

A.6 National Data Model Management

Currently, this section identifies

- valid values for enumeration type data elements which appear in the national tables,
- example values for alpha/numeric type data elements which appear in the national tables, where an example set of valid values provides additional information,
- reference to an existing publication which provides valid values for national data elements.

A.6.1 State/Province

Recommended abbreviations for United States State codes are contained in the United States Postal Service Publication 28, Postal Addressing Standards.

A.6.2 Location Designator

Recommended abbreviations for Location Designator are contained in the United States Postal Service Publication 28, Postal Addressing Standards, Secondary Unit Designators Section.

Spectrum Management Classes

Classes are defined in T1E1.4.

Appendix B. Protocol Tables

The tables in this Appendix represent differences between various protocols used to carry traffic in the backbone network.

Currently the Complex Base Data Types which contain protocol-dependent data elements are:

- RBN Transport Service Configuration Information
- Layer 2 CPE Configuration Information

B.1 RBN Transport Service Configuration Information

The following table identifies data elements to include with RBN Transport Service Configuration Information when ATM is the protocol.

Table 209: RBN Transport Service Configuration Information - ATM

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
209	**RBN Transport Service Configuration Information - ATM**					
209.1	AP Virtual Circuit	Virtual Circuit at the Access Provider end.	Virtual Circuit	See Table 31:	Required	
209.2	SP Virtual Circuit	Virtual Circuit at the Service Provider end.	Virtual Circuit	See Table 31:	Required	
209.3	ATM Traffic Parameters	Data elements which comprise the AToM MIB are defined in RFC2515	AToM MIB	See Section 6. "Glossary and References" [7]	Conditional	Depends on type of service being configured.

The following table identifies data elements to include with RBN Transport Service Configuration Information when Frame Relay is the protocol.

Table 210: RBN Transport Service Configuration Information - Frame Relay

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
210	**RBN Transport Service Configuration Information - Frame Relay**					
210.1	AP Virtual Circuit	Virtual Circuit at the Access Provider end.	Virtual Circuit	See Table 31:	Required	
210.2	SP Virtual Circuit	Virtual Circuit at the Service Provider end.	Virtual Circuit	See Table 31:	Required	
210.3	Frame Relay Traffic Parameters				Conditional	Depends on type of service being configured.

B.2 Layer 2 CPE Configuration Information

The following table identifies data elements to include with Layer 2 CPE Configuration Information when ATM is the protocol.

Table 211: Layer 2 CPE Configuration Information - ATM

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
211	**CPE Configuration Information - ATM**					
211.1	ATM Traffic Parameters - CPE Side	Data elements are defined in ATM Forum documents.		See Section 6. "Glossary and References" [13], [14], and [15]	Conditional	Depends on type of service being configured.
211.2	ATM Traffic Parameters - DSLAM Side	Data elements which comprise the AToM MIB are defined in RFC2515	AToM MIB	See Section 6. "Glossary and References" [7]	Conditional	Depends on type of service being configured.

The following table identifies data elements to include with Layer 2 CPE Configuration

Information when Frame Relay is the protocol.

Table 212: Layer 2 CPE Configuration Information - Frame Relay

	Field Name	Description	Data Type	Data Characteristics	Usage	Usage Notes
212	**CPE Configuration Information - Frame Relay**					
212.1	Frame Relay Traffic Parameters				Conditional	Depends on type of service being configured.