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Electronic Access to Video Dial Tone Administrative System Network Interface Specifications

Technical Reference

NOTICE

This Technical Reference is published by BellSouth Telecommunications, Inc., and provides information required for electronic access to the Video Dialtone (VDT) Administrative System associated with Video Dialtone Service. This document is intended to provide information relating to the interoperability of the Operations Support System (OSS) of any Video Programmer, Video Information Provider, or Enhanced Video Gateway Provider (i.e., customers) with the BST Video Dialtone Administrative System.

At present, Video Dialtone Service will be available only on a trial basis in a limited area in Chamblee, Georgia and adjacent communities in DeKalb County, Georgia.

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ELECTRONIC ACCESS TO VIDEO DIALTONE ADMINISTRATIVE SYSTEM
NETWORK INTERFACE SPECIFICATIONS

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ELECTRONIC ACCESS TO VIDEO DIALTONE ADMINISTRATIVE SYSTEM NETWORK INTERFACE SPECIFICATIONS

1. General

This document describes the network interface (NI) specifications for Electronic Access to BellSouth's Video Dialtone Administrative System. This document is intended to provide the information necessary for the interoperability of an Operations Support System (OSS) of any Video Programmer, Video Information Provider, or Enhanced Video Gateway provider (customer) with BellSouth's Video Dialtone Administrative System.

1.1 Reason for Re−issue

This document is being re−issued to define changes to the messages exchanged across the network interface and to correct typographical errors. The major changes are as follows:

- A "Data Required" column has been added to every field of every message.
- Communication procedures have been described in greater detail.
- PC Data Services related fields have been added.
- The "Restore" message type is being deleted.
- The "Trouble Report Query−Response" message has been added.
- "Disconnect" and "Change of Service" message procedures have been changed.

2. Service Definition

Electronic Access to BellSouth's Video Dialtone Administrative system is designed to assist the customer in providing seamless service to their subscribers, and is offered in conjunction with Video Dialtone Service. This capability will allow the customer to electronically provide BST information in the areas of service requests and trouble reports. Electronic messages will be combined in a manner to allow the two parties to complete various business functions.

Each business function has been defined as a specific type of service request that a customer will ask BellSouth Telecommunications (BST) to perform. These business functions are listed below.

Install	BST Record Update	Disconnect	Trouble Report
Cancel	Query	Record Update	Change of Service

Section 4 of this document details the interaction between BST and the customer for each business function listed.

3. Network Interface Protocol Specifications (Transport)

This section describes the protocols used for Physical, Data Link, Network and Transport functions across the BST network interface.

3.1 Physical Layer Specifications

The physical layer of the network interface will be provided via a standard IEEE 802.3[1] compliant 10 Mb/s Carrier Sense Multiple Access with Collision Detection (CSMA/CD) connection. The standard interface supported will be a Fiber Optic Inter−Repeater Link (FOIRL) as described in IEEE 802.3.

3.2 Data Link Layer Specifications

The data link layer of the network interface is divided into two sub−layers. The lower sub−layer will conform to CSMA/CD Medium Access Control (MAC) protocol as described in IEEE 802.3.

The upper sub−layer of the data link layer will conform to Logical Link Control protocol as described in IEEE 802.2[2].

3.3 Network Layer Specifications

The network layer of the network interface will conform to Internet Protocol (IP) as described in RFC−791[3]. This interface will also support messages utilizing the Internet Control Message Protocol (ICMP) as described in RFC−792[4].

3.4 Transport Layer Specifications

The transport layer of the network interface will conform to Transmission Control Protocol (TCP) as described in RFC−793[5].

The Application Program Interface (API) between the TCP and the process layer shall utilize Berkeley Software Distribution (BSD) sockets based upon release 4.3BSD[6].

4. Network Interface Protocol Specification (Application)

This section describes the protocol used for application layer functions that cross the BST network interface.

Procedures are outlined for each service request type. Each service request procedure is described as to it's intended function and the logical steps followed by the application to accomplish that function. The messages exchanged during these procedures are identified by message type. (**Each message type and associated fields are described in detail in section 5 of this document.**) The reader should refer to section 5 for specific information regarding the fields addressed in the following descriptions.

4.1 Login Procedures

The applications layer will handle the actual administrative business functions. In order to send and receive messages, BST must establish certain data items for each customer. These items are as follows:

IP Address
Socket Port Assignment
Customer Id
Login Id
Login password

Once these items have been established for an individual customer, login procedures may occur.

BST will assign and provide the customer with the items listed above. The customer will login to the administrative system by sending the LOGIN MESSAGE (99). Once BST receives the login message, BST will validate the login id and login password.

If the customer login is successful, BST will reply with a STATUS MESSAGE (02). This status message will have its request processed indicator field set to Y and its number of errors field populated with zero.

If the login was unsuccessful, BST will also reply with a STATUS MESSAGE (02). However, this status message will have the highest error severity field with a value greater than zero (0) and the number of errors field populated with the number of errors that occurred during the login process. The customer should review the error description fields to determine why the login was not successful.

Please note that the STATUS MESSAGE (02) message key fields are blank when this message is sent in response to a LOGIN MESSAGE (99).

BST provides for continuous operations systems support, therefore once the customer has logged into the service, the customer will remain logged in. However, if the communications link does go down, then the customer should login again as soon as the link is back on−line.

If a login is dropped at any time, it is the responsibility of the customer to reestablish the connection. While the connection is down, messages should be stored and subsequently forwarded once the connection is reestablished. Messages will be stored by BST in a queue and will be forwarded at reconnection also.

Listed below is the message interaction for the login function.

LOGIN			
Sender	**Receiver**	**Message**	**Times Sent**
Customer	BST	99 − LOGIN MESSAGE	1
BST	Customer	02 − STATUS MESSAGE	1

4.2 Service Request Interactions

Upon successful login of the customer to the administrative system, business functions may be initiated. As listed below , business functions are initiated from the customer to BST in the form of service requests. The service request will involve numerous message interactions between the customer and BST prior to successful completion of the service request.

The service request type as well as its associated code are as follows:

Service Request Type	Service Request Type Code
Install	I
Change of Service	C
Disconnect	D
Record Update	U
Cancel	X
Trouble Report	T
Query	Q

The Service Request Type Code will be the unique field in each message record that will identify the business function/service request need that is being processed.

The install, disconnect, change of service, and trouble report service requests are sent to BST as soon as possible after the customer takes the request from the subscriber. Since these requests may require BST to schedule work force activity, BST would like knowledge of the request as far in advance as possible in order to meet the commitment date to the subscriber.

Since the other service requests do not require BST to schedule work force activity, BST requires that these service requests be sent on the day that they are to be completed.

4.3 Timing of Message Interactions

BST will negotiate a defined time interval for messages between BST and the customer. This interval should be negotiated at interface implementation with a customer.

Due to the fact that it may take either party a period of time to complete their portion of the request, the administrative system has been designed with this time delay issue in mind. The administrative service requires that once either party initiates a message, the other party will immediately respond back with an ACKNOWLEDGE MESSAGE (00). Once the original message has been acknowledged, the receiving party will then process the original message.

Once BST receives a negative acknowledgement for a given message from a customer a total of three times, the communications pipe will be closed. If a customer receives a negative acknowledgement from BST a total of three times, the customer should close the communications pipe. In either case, once the customer logs back in, the original message should be retransmitted.

A resend or retransmission is defined as being necessary when a message originator sends a message and does not receive an acknowledgement. The interface will attempt a resend or retransmission of a message if no response is received from the customer (maximum of 99 times). Once the maximum has been reached, the communications pipe will be closed. The customer will be required to login to reestablish communications.

4.4 Error Handling

Please note that at any time during the processing of the interaction, either BST or the customer may send a STATUS MESSAGE (02) to indicate that errors occurred during the processing.

Once BST has sent a status message containing a processing status indicator set to 1, the service request is considered aborted and a new service request must be sent.

4.5 Rescheduling a Pending Request

There is no message layout for a RESCHEDULE MESSAGE. A reschedule message is the same as the last version of the install, restore, or trouble report message that it is to replace, except that the service request version field is incremented by one.

4.6 Install Service Request

The install service request interactions will be initiated by the customer to BST so that the customer's subscriber may be activated to the BST VDT network.

Once the customer has taken a request for VDT services from the subscriber, the customer should immediately create a INSTALL MESSAGE (01) and send to BST. This message will request that BST activate network service for a specific subscriber at a given address by a given date and time.

BST will immediately respond back to the customer with an ACKNOWLEDGE MESSAGE (00).

After the acknowledge message has been sent, BST will validate the request. BST will then verify that their portion of the request will be completed by the due date. If it is determined that BST will not meet the due date and time, BST will send a SCHEDULE CHANGE MESSAGE (03) back to the customer with a scheduled date and time that BST will have their portion of the service request completed. This message also contains a customer due date impacted field that will alert the customer that BST can not meet the customer's committed complete date to the subscriber.

The customer will immediately respond with an ACKNOWLEDGE MESSAGE (00).

From this point in time until the BST portion of the service request is complete, either BST or the customer may change the due date and time. If BST has to change their scheduled date and time, BST will send another SCHEDULE CHANGE MESSAGE (03). If the customer has to change the original due date and time, the customer will send another copy of the last version of the INSTALL MESSAGE (01) with the service request version number incremented by one and the new due date and time populated in the date due and date time fields.

If there is a need for the customer to add, change, or delete any other fields within this install request other than the due date and due time, then the customer will again send another copy of the last version of the INSTALL MESSAGE (01) with the service request version number incremented by one and the new data populated in the appropriate fields or the deleted items spaced out in the appropriate fields.

Once BST has activated the network for the original install message, BST will send a READY FOR SERVICE MESSAGE (04). This message will notify the customer with the date and time the network was activated. In addition, BST will provide the customer with the tap location and tap port number where the drop is physically located for this subscriber. This data is being provided to assist the customer's technician in trouble shooting if problems occur during the subscriber installation premise visit.

The customer will immediately respond back to BST with an ACKNOWLEDGE MESSAGE (00).

Once the customer has completed their portion of the service request, the customer will send BST a COMPLETION MESSAGE (05). This message will notify BST of any subscriber premise equipment (SPE) that BST must be aware of to provide network connection (i.e., digital or PC Services equipment). This completion message may be provided from the customer prior to BST sending the customer a ready for service message.

Please note that a completion message will only allow reporting up to 50 pieces of equipment. If the subscriber has additional equipment items that should be forwarded to BST, the customer should generate a change of service request. See the CHANGE OF SERVICE request section for the messaging procedures.

Once BST has received the completion message, BST will immediately respond back to the customer with an ACKNOWLEDGE MESSAGE (00).

BST will process the completion message and send the customer a STATUS MESSAGE (02) with the final response indicator set to yes that will complete the install service request.

The customer will immediately respond back to BST with an ACKNOWLEDGE MESSAGE (00) and the install service request is considered complete by both parties.

Below is the Install service request interaction chart.

INSTALL			
Sender	**Receiver**	**Message**	**Times Sent**
Customer	BST	01 – INSTALL MESSAGE	1
BST	Customer	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	03 – SCHEDULE CHANGE MESSAGE	0:M
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	04 – READY FOR SERVICE MESSAGE	1
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1
Customer	BST	05 – COMPLETION MESSAGE	1
BST	Customer	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	02 – STATUS MESSAGE	1
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1

4.7 Change of Service Request

The change of service request interactions will be initiated by the customer to BST to change either the subscriber's network products or the subscriber's premise equipment that BST has knowledge of.

Once the customer has taken a request for the change of VDT services from the subscriber, the customer should immediately create a CHANGE OF SERVICE MESSAGE (06) and send to BST.

BST will immediately respond back to the customer with an ACKNOWLEDGE MESSAGE (00).

After the acknowledge message has been sent, BST will validate the request. BST will then verify that their portion of the request will be completed by the due date. If it is determined that BST will not meet the due date and time, BST will send a SCHEDULE CHANGE MESSAGE (03) back to the customer with a scheduled date and time that BST will have their portion of the service request completed. This message also contains a customer due date impacted field that will alert the customer that BST can not meet the customer's committed complete date to the subscriber.

The customer will immediately respond with an ACKNOWLEDGE MESSAGE (00).

From this point in time until the BST portion of the service request is complete, either BST or the customer may change the due date and time. If BST has to change their scheduled date and time, BST will send another SCHEDULE CHANGE MESSAGE (03). If the customer has to change the original due date and time, the customer will send another copy of the last version of the CHANGE OF SERVICE MESSAGE (06) with the service request version number incremented by one and the new due date and time populated in the date due and date time fields.

If there is a need for the customer to add, change, or delete any other fields within this change of service request other than the due date and the due time, then the customer will again send another copy of the last version of the CHANGE OF SERVICE MESSAGE (06) with the service request version number incremented by one and the new data populated in the appropriate fields or the deleted items spaced out in the appropriate fields.

Once BST has applied the changes to the network for the original change of service message, BST will send a READY FOR SERVICE MESSAGE (04). This message will notify the customer with the date and time the network changes were made.

The customer will immediately respond back to BST with and ACKNOWLEDGE MESSAGE (00).

Once the customer has completed their portion of the service request, the customer will send BST a COMPLETION MESSAGE (05). This message will notify BST of any subscriber premise equipment (SPE) that BST must be aware of to provide network connection (i.e., digital or PC Services equipment).

Once BST has received the completion message, BST will immediately respond back to the customer with an ACKNOWLEDGE MESSAGE (00).

BST will process the completion message and send the customer a STATUS MESSAGE (02) with the processing status indicator set to 2 that will complete the change of service request.

The customer will immediately respond back to BST with an ACKNOWLEDGE MESSAGE (00) and the change of service request is considered complete by both parties.

Below is the Change of Service request interaction chart.

CHANGE OF SERVICE			
Sender	**Receiver**	**Message**	**Times Sent**
Customer	BST	06 – CHANGE OF SERVICE MESSAGE	1
BST	Customer	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	03 – SCHEDULE CHANGE MESSAGE	0:M
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	04 – READY FOR SERVICE MESSAGE	1
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1
Customer	BST	05 – COMPLETION MESSAGE	1
BST	Customer	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	02 – STATUS MESSAGE	1
Customer	BST	00 – ACKNOWLEDGE MESSAGE	

4.8 Disconnect Service Request

The disconnect service request interactions will be initiated by the customer to BST so that the customer's subscriber may be deactivated from the BST VDT network.

The customer will determine the scheduled date and time of the disconnect and immediately create a DISCONNECT MESSAGE (07) and send to BST.

BST will immediately respond back to the customer with an ACKNOWLEDGE MESSAGE (00).

After the acknowledge message has been sent, BST will validate the request. BST will then verify that their portion of the request will be completed by the due date. If it is determined that BST will not meet the due date and time, BST will send a SCHEDULE CHANGE MESSAGE (03) back to the customer with a scheduled date and time that BST will have their portion of the service request completed. This message also contains a customer due date impacted field that will alert the customer that BST can not meet the customer's committed complete date to the subscriber.

The customer will immediately respond with an ACKNOWLEDGE MESSAGE (00).

From this point in time until the BST portion of the service request is complete, either BST or the customer may change the due date and time. If BST has to change their scheduled date and time, BST will send another SCHEDULE CHANGE MESSAGE (03). If the customer has to change the original due date and time, the customer will send another copy of the last version of the DISCONNECT MESSAGE (07) with the service request version number incremented by one and the new due date and time populated in the date due and date time fields.

If there is a need for the customer to add, change, or delete any other fields within this disconnect of service request other than the due date and the due time, then the customer will again send another copy of the last version of the DISCONNECT MESSAGE (07) with the service request version number incremented by one and the new data populated in the appropriate fields or the deleted items spaced out in the appropriate fields. BST will process the disconnect message on the due date and due time.

Once completed, BST will send the customer a DISCONNECT MESSAGE (07) with the BST Actual Date of Disconnect and BST Actual Time of Disconnect fields populated.

The customer will immediately respond back to BST with an ACKNOWLEDGE MESSAGE (00) and the disconnect service request is considered complete by both parties.

Below is the Disconnect service request interaction chart.

DISCONNECT			
Sender	**Receiver**	**Message**	**Times Sent**
Customer	BST	07 – DISCONNECT MESSAGE	1
BST	Customer	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	03 – SCHEDULE CHANGE MESSAGE	0:M
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	07 – DISCONNECT MESSAGE	1
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1

4.9 Record Update Service Request

The record update service request interactions will be initiated by the customer to BST so that the customer may provide BST with the customer's subscriber account maintenance that does not affect the BST VDT network.

The customer will initiate the record update service request on the date that the customer account records were changed.

The customer will create a RECORD UPDATE MESSAGE (08) and send to BST.

BST will immediately respond back to the customer with an ACKNOWLEDGE MESSAGE (00).

After the acknowledge message has been sent, BST will validate the request. BST will process the update record message and send the customer a STATUS MESSAGE (02) with the processing status indicator set to 2 that will complete the record update service request.

The customer will immediately respond back to BST with an ACKNOWLEDGE MESSAGE (00) and the record update service request is considered complete by both parties.

Below is the Record Update service request interaction chart.

RECORD UPDATE			
Sender	**Receiver**	**Message**	**Times Sent**
Customer	BST	08 – RECORD UPDATE MESSAGE	1
BST	Customer	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	02 – STATUS MESSAGE	1
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1

4.10 Cancel Service Request

The cancel service request interactions will be initiated by the customer to BST when the customer determines that a pending service request should be canceled. The pending requests may be on the following messages: INSTALL MESSAGE (01), DISCONNECT MESSAGE (07), CHANGE OF SERVICE MESSAGE (06), or TROUBLE REPORT MESSAGE (10) that was initiated by a customer and that is still open (i.e., COMPLETION MESSAGE (05) or STATUS MESSAGE (02) indicating a final response has not been received by the customer.).

The customer will initiate the cancel service request immediately upon determining that a pending request should be canceled.

The customer will create a CANCEL MESSAGE (09) and send to BST.

BST will immediately respond back to the customer with an ACKNOWLEDGE MESSAGE (00).

After the acknowledge message has been sent, BST will validate the request. BST will insure that the Customer ID, Service Request Number, Service Request Version, Account ID, and VSO match exactly to the fields in the install, restore, trouble report that is to be canceled. Once a correct match is found, BST will cancel the requested message and send the customer a STATUS MESSAGE (02) with the processing status indicator set to 2 that will complete the cancel service request.

The customer will immediately respond back to BST with an ACKNOWLEDGE MESSAGE (00) and the cancel service request is considered complete by both parties.

Below is the Cancel service request interaction chart.

CANCEL			
Sender	**Receiver**	**Message**	**Times Sent**
Customer	BST	09 – CANCEL MESSAGE	1
BST	Customer	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	02 – STATUS MESSAGE	1
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1

4.11 Customer Initiated Trouble Report Service Request

The customer initiated trouble report service request interactions will be initiated by the customer to BST when a customer's subscriber has reported trouble with their service.

Once the customer has taken the trouble report from the subscriber, the customer should immediately create a TROUBLE REPORT MESSAGE (10) and send to BST. This message will request that BST investigate the problem and if possible clear the trouble by the due date and due time that the customer's employee committed to the subscriber to have the trouble corrected.

BST will immediately respond back to the customer with an ACKNOWLEDGE MESSAGE (00).

After the acknowledge message has been sent, BST will validate the request. BST will then determine how and when the trouble can be cleared. If it is determined that BST can not meet the due date and time, BST will send a SCHEDULE CHANGE MESSAGE (03) back to the customer with a scheduled date and time that BST will have their portion of the service request completed. This message also contains a customer due date impacted field that will alert the customer that BST can not meet the customer's committed complete date to the subscriber.

The customer will immediately respond back to BST with an ACKNOWLEDGE MESSAGE (00).

From this point in time until the BST portion of the service request is complete, either BST or the customer may change the due date and time. If BST has to change their scheduled date and time, BST will send another SCHEDULE CHANGE MESSAGE (03). If the customer has to change the original due date and time, the customer will send another copy of the last version of the TROUBLE REPORT MESSAGE (10) with the service request version number incremented by one and the new due date and time populated in the date due and date time fields.

If there is a need for the customer to add, change, or delete any other fields within this trouble report request other than the due date and due time, then the customer will again send another copy of the last version of the TROUBLE REPORT MESSAGE (10) with the service request version number incremented by one and the new data populated in the appropriate fields or the deleted items spaced out in the appropriate fields.

Once BST has determined the trouble and corrected the problem, BST will send a TROUBLE REPORT RESOLUTION MESSAGE (11). This message will notify the customer with the resolution date and time that the trouble was corrected, as well as, a resolution description.

The customer will immediately respond back to BST with an ACKNOWLEDGE MESSAGE (00) and the trouble report request is considered complete by both parties.

Below is the customer initiated trouble report service request interaction chart.

TROUBLE REPORT CUSTOMER INITIATED			
Sender	**Receiver**	**Message**	**Times Sent**
Customer	BST	10 – TROUBLE REPORT	1
BST	Customer	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	03 – SCHEDULE CHANGE MESSAGE	0:M
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	11 – RESOLUTION MESSAGE	1
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1

4.12 BST Initiated Trouble Report Service Request

The BST initiated trouble report service request interactions will be initiated by BST to the customer when BST determines that there is a problem with the customer's service.

Once BST knows of network problems, BST will immediately create a TROUBLE REPORT MESSAGE (10) and send to the customer. This message will notify the customer of equipment and/or subscribers that are affected. The customer id field will contain the customer's id that BST is sending the message to. The service request number will contain BST's trouble ticket number for reference if telephone conversations occur. The service request version number and account id fields will be spaces. The due date and time fields will also be spaces. The types of equipment and associated equipment ids will be listed if numerous subscribers are impacted. If the trouble affects only several subscribers, the trouble report will contain the customer's subscriber's account ids.

The customer will immediately respond back to the customer with an ACKNOWLEDGE MESSAGE (00).

BST will then determine how and when the trouble can be cleared. Once this is determined, BST will send a SCHEDULE CHANGE MESSAGE (03) back to the customer with a scheduled date and time that BST will have the trouble cleared.

The customer will immediately respond back to BST with an ACKNOWLEDGE MESSAGE (00).

From this point in time until the BST portion of the service request is complete, BST may change the due date and time. If BST has to change their scheduled date and time, BST will send another SCHEDULE CHANGE MESSAGE (03).

Once BST has determined the trouble and corrected the problem, BST will send a TROUBLE REPORT RESOLUTION MESSAGE (11). This message will notify the customer with the resolution date and time that the trouble was corrected, as well as, a resolution description.

The customer will immediately respond back to BST with an ACKNOWLEDGE MESSAGE (00) and the trouble report request is considered complete by both parties.

Below is the BST initiated trouble report service request interaction chart.

TROUBLE REPORT BST INITIATED			
Sender	**Receiver**	**Message**	**Times Sent**
BST	Customer	10 – TROUBLE REPORT	1
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	03 – SCHEDULE CHANGE MESSAGE	0:M
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	11 – RESOLUTION MESSAGE	1
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1

4.13 Query Service Request

The query service request interactions will be initiated by the customer to BST so that the customer may query a pending service request or a customer's subscriber's account.

Once the customer determines that a query is necessary, the customer should create a QUERY MESSAGE (12) and send to BST. This message will request that BST provide information on a specific pending service request or a specific subscriber account.

BST will immediately respond back to the customer with an ACKNOWLEDGE MESSAGE (00).

After the acknowledge message has been sent, BST will validate the request.

If the query requests information on a pending service request, BST will then locate the pending service request by matching on the query service request number and query service request version fields. Once found, BST will send a SERVICE REQUEST QUERY RESPONSE MESSAGE (14) to the customer with all the pending service request fields populated.

The customer will immediately respond back to BST with an ACKNOWLEDGE MESSAGE (00) and the query service request is considered complete by both parties.

If the query requests information on a subscriber account, BST will then locate the subscriber account by matching on the query account id. Once found, BST will send a END SUBSCRIBER QUERY RESPONSE MESSAGE (13) to the customer with all the subscriber fields populated.

The customer will immediately respond back to BST with an ACKNOWLEDGE MESSAGE (00) and the query service request is considered complete by both parties.

If the query requests information on a pending trouble report, BST will then locate the pending trouble report by matching on the query service request number and query service version fields. Once found, BST will send a TROUBLE REPORT QUERY RESPONSE MESSAGE (15) to the customer with all the pending trouble report fields populated.

The customer will immediately respond back to BST with an ACKNOWLEDGE MESSAGE (00) and the query service request is considered complete by both parties.

Below is the Query service request interaction chart.

QUERY			
Sender	**Receiver**	**Message**	**Times Sent**
Customer	BST	12 – QUERY MESSAGE	1
BST	Customer	00 – ACKNOWLEDGE MESSAGE	1
BST	Customer	13 – END SUBSCRIBER QUERY RESPONSE MESSAGE **– OR –** 14 – SERVICE REQUEST QUERY RESPONSE MESSAGE **– OR –** 15 – TROUBLE REPORT QUERY RESPONSE MESSAGE	1
Customer	BST	00 – ACKNOWLEDGE MESSAGE	1

4.14 BST Record Update Service Request

The BST record update service request interactions will be initiated by BST to the customer so that BST may provide the customer with network maintenance or "undo" functions that affect the customer's subscriber account.

An example of an "undo" function would be if BST notifies the customer that a particular subscriber account is ready for service. However, for some reason after the Ready for Service Message has been sent, BST determines that the network is not available and must undo the ready for service status.

BST will initiate the BST record update service request on the date that the customer account network records are changed.

BST will create a BST RECORD UPDATE SERVICE MESSAGE (16) and send to the customer.

The customer will immediately respond back to BST with and ACKNOWLEDGE MESSAGE (00).

After the acknowledge message has been sent, the customer will validate the request. The customer will process the update record message and send BST a STATUS MESSAGE (02) with a processing status indicator set to 2. This will complete the BST record update service request.

BST will immediately respond back to the customer with an ACKNOWLEDGE MESSAGE (00) and the BST record update service request is considered complete by both parties.

Below is the BST Record Update service request interaction chart.

BST RECORD UPDATE			
Sender	**Receiver**	**Message**	**Times Sent**
BST	Customer	16 – BST RECORD UPDATE MESSAGE	1
Customer	BST	00 – ACKNOWLEDGE MESSAGE	
Customer	BST	02 – STATUS MESSAGE	1
BST	Customer	00 – ACKNOWLEDGE MESSAGE	

5. Data Message Specifications

5.1 General

This section lists the data messages used by the BST Video Dialtone Administrative System, describes the data layout format and gives general information about data field content.

5.2 Message List

The following is a list of the messages available.

MESSAGE TYPE	MESSAGE DESCRIPTION
00	Acknowledgment receipt of a message sent from the other party
01	Request from a customer to BST to install a customer's subscriber to the network
02	Status of a message is used for all intermediate messaging, as well as, a completion message for all services except an install and a restore
03	Schedule change will be used by BST to inform the customer of a rescheduled date and time to a pending install, restore, or trouble report service request
04	Ready for service message is sent from BST to the customer during an install or restore service request once the network has been activated
05	Completion message is sent by the customer to BST once the subscriber CPE has been installed
06	Change of service message is initiated by the customer when there is a change to the subscriber's CPE or service product
07	Disconnect message is initiated by the customer to deactivate a subscriber from the network
08	Record update is initiated by the customer to change a subscriber's account with an detail that is not network affecting
09	Cancel will cause BST to delete a customer's pending install, restore, or trouble report service request
10	Trouble report will be initiated by either party when a trouble has been detected affecting subscribers services
11	Trouble report resolution will be initiated by either party when a trouble affecting subscribers services has been resolved

12	Query will allow the customer to receive information from BST concerning a pending service request or current information BST has on record about a given customer's subscriber
13	Pending service request query will be provided by BST in response to a customer's query
14	Subscriber query response will be provided by BST in response to a customer's query
15	Pending trouble report query will be provided by BST in response to a customer's query
16	BST record update is initiated by BST where there is a change to the subscriber's network elements.
99	Login will allow a customer to log into the BST Administrative System

5.3 Data Field Usage

To allow for conversion between dissimilar platforms, all data contained in the following messages must conform to the following:

- MESSAGE HEADER is unsigned long integers, 32 bits (ULONG)
- MESSAGE AREA will contain two types of data as follows:
- ALPHA data is in ASCII format and case insensitive
- NUMERIC data is in LITTLE ENDIAN format

To simplify the conversion of numbers between various platforms, all numbers are represented by character digits in the messages. Therefore, all data formats are Alphanumeric.

Certain constraints must be adhered to when data is or is not entered into the fields. The following describes the characteristics or uses of data fields.

(1) Default/Initialization Values

All required data fields will be left−justified with trailing spaces.
All non−required data fields will contain a default value of spaces.

(2) Date Fields

All DATE fields are represented as CYYMMDD, where
C = Century (1 = 20th, 2 = 21st)
YY = last two digits of the year
MM = two digit month
DD = two digit day

June 1, 1997 would be 1970601.

August 18, 2002 would be 2020818.

(3) Time Fields

All TIME fields are represented as HHMM, where HH = two digit hours on a 24 hour clock

MM = two digit minutes,

2:45 AM would be 0245.
2:45 PM would be 1445.

(4) Numeric Fields

All data fields will contain only whole numbers. The embedded comma will not be allowed.

20,582 would be 20582.

(5) Telephone Number (TN) Fields

All TN fields are represented as NPANxxLLLL, where
NPA = three digit area code
Nxx = three digit central office
LLLL = four digit line number

404−529−6937 would be 4045296937.

00 − ACKNOWLEDGE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	21	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	0	Y	
21	Message Accepted	Alpha	1	Y, N	Y	Message Accepted Y = message acknowledged and will be processed N = message not understood and will not be processed

01 – INSTALL MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1–4	Size of Buffer Sent	ULONG	4 bytes	1722	Y	
5–8	Size of Message Header	ULONG	4 bytes	20	Y	
9–12	Check Value	ULONG	4 bytes		N	Unused by Customer
13–16	Message Type	ULONG	4 bytes	10	Y	
17–20	Message ID	ULONG	4 bytes	1	Y	
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
21–22	Retry Indicator	ULONG	2 bytes	00–99	Y	This field will contain the Retry or resend number of the message being transmitted.
23–28	Interface Version	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is currently processing.
29–36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for each Customer. This code will be assigned by BST.
37	Service Request Type	Alpha	1	I	Y	This field will contain the type of service request message to be processed. An install will be 'I'.
38–49	Service Request Number	Alpha	12		Y	This field is populated with the service request number generated by the Customer.
50–51	Service Request Version	Alpha	2	00–99	Y	This field is populated by the customer with the version number of a particular instance of the request. The first time the request is sent the field is populated with 00. Any resend of the request is updated by one.
52–81	Account ID	Alpha	30		Y	This field is populated with the account number generated by the Customer originating the message. The account number should contain enough information so that the customer will be able to guide the BST message responses back to a given account in their system.
82–89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office that the subscriber receives the transport service from.

01 – INSTALL MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
90–97	Priority	Alpha	8	See Attachment 1	Y	This field contains the level of priority assigned to a service request for scheduling and delivery.
98–105	Service Request Date	Alpha	7	CYYMMDD	Y	This field will contain the original date the service request was placed by the subscriber to the customer.
105–108	Service Request Time	Alpha	4	HHMM	Y	This field will contain the original time the service request was placed by the subscriber to the customer.
109–139	Customer Employee Name	Alpha	30		Y	This field will contain the identification of the customer's employee that initially took the subscriber's request.
140–145	Date Due	Alpha	7	CYYMMDD	Y	This field will contain the due date that the customer's employee committed to the subscriber to have the request completed.
146–149	Time Due	Alpha	4	HHMM	Y	This field will contain the due time that the customer's employee committed to the subscriber to have the request completed.
150–169	Account Contact First Name	Alpha	20		Y	This field will contain the first name of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.
170–189	Account Contact Last Name	Alpha	20		Y	This field will contain the last name of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.
190–199	Account Contact Home Phone	Alpha	10	NpaNxxLLLL	Y	This field will contain the home telephone number of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.
200–209	Account Contact Work Phone	Alpha	10	NpaNxxLLLL	N	This field will contain the work telephone number of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.
210–215	Account Contact Work Extension	Alpha	6		N	This field will contain the work telephone extension of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.
216–315	Customer Comments	Alpha	100		N	This field will contain any information that the customer deems beneficial that BST should retain on their subscriber.

01 − INSTALL MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Service Address					This field will contain the service address of the customer account that should receive network services. This field must match exactly with the original homes passed address that BST provided the customer.
316−327	Service Address Key	Alpha	12		N	This field will contain the unique key for the service address of the customer account.
328−340	Street Number	Alpha	13		Y	
341−400	Street Name	Alpha	60		Y	
401−415	Structure	Alpha	15		N	This field will contain the following data: Building = BLDG ____ Wing = WNG ____ Pier = PIER ____
416−430	Unit	Alpha	15		N	This field will contain the following data: Apartment = APT ____ Room = RM ____ Lot = LOT ____ Slip = SLIP ____ Suite = SUIT ____ Unit = UNIT ____
431−445	Elevation	Alpha	15		N	This field will contain the following data: Floor = FLR ____
446−477	City	Alpha	32		Y	
478−479	State	Alpha	2		Y	This field will contain the two character state abbreviation.
480−490	Zip	Alpha	11		Y	This field will contain the zip code+4+2 where appropriate.
491−492	Number of Products Requested	Alpha	2	1−50	Y	This field will contain the number of products that are being requested on this install message. The maximum number of products for a given message is 50.
493−1292	Products Requested					Repeats 50 times
	Product Requested	Alpha	8		Y	This field will contain the subscriber product requested for network service activation. The current products available are: unanalog = unscrambled analog scanalog = scrambled analog bdigital = broadcast digital nvod = near video on demand digital idigital = interactive digital pcsvc = PC Services other = Other products

01 – INSTALL MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Product Customer Id	Alpha	8		Y	This field will contain the unique identification code for the customer providing the product. This code is assigned by BST.
1293–1692	Service Request Comments	Alpha	400		N	This field will contain any comments that the customer's employee noted that pertain to this specific service request. This field will not be permanently retained by BST on the subscriber account.
1693	Additional Drop Ind	Alpha	1	Y, N	Y	This field will be populated by the customer to inform BST when an additional drop is requested for additional network capacity. Y = Additional drop is to be installed at this address. N = Additional account to be added to existing drop.
1694–1713	Subscriber First Name	Alpha	20		N	This field will contain the first name of the person that is the account owner.
1714–1733	Subscriber Last Name	Alpha	20		N	This field will contain the last name of the person that is the account owner.
1734–1743	Subscriber Home Phone Number	Alpha	10	NpaNxxLLLL	N	This field will contain the home telephone number of the subscriber.
1744–1753	Subscriber Work Phone	Alpha	10	NpaNxxLLLL	N	This field will contain the work telephone number of the subscriber.
1754–1759	Subscriber Work Extension	Alpha	6		N	This field will contain the work telephone extension of the subscriber.

02 − STATUS MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	553	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	2	Y	
21−22	Retry Indicator	ULONG	2 bytes	00−99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23−28	Interface Version	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is currently processing.
29−36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for each Customer. This code will be assigned by BST.
37	Service Request Type	Alpha	1	C, D, I, Q, T, U, X,	Y	This field will contain the original type of service request that this message is responding to. Status messages will be created for the following types of service requests: C = Change of service D = Disconnect I = Install Q = Query T = Trouble Report U = Record Update X = Cancel
38−49	Service Request Number	Alpha	12		Y	This field is populated with the service request number from the original message that BST is reporting.
50−51	Service Request Version	Alpha	2	00−99	Y	This field is populated with the version number from the original message that BST is reporting.
52−81	Account ID	Alpha	30		Y	This field is populated with the account number from the original message that BST is reporting.

02 − STATUS MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
82−89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office that the subscriber receives the transport service from.
90	Processing Status	Alpha	1	0,1,2	Y	This field will inform the customer whether or not BST has completed processing the original service request. The values are: 0 = Transaction in progress 1 = Error − Transaction stopped 2 = Transaction complete
91	Highest Error Severity	Alpha	1	0 − 9	Y	This field will inform the customer of the highest severity error that BST assigned. BST will continue to process the service request and identify all known errors with each version that is received. Nine is the highest severity assigned.
92−93	Number of Errors	Alpha	2	0 − 10	Y	This field will contain the number of errors assigned to the original service request. BST is able to send up to 10 errors in a given status message.
94−553	Errors					Repeats 10 times
	Error Severity	Alpha	1	0 − 9	Y*	This field will contain the error severity assigned to a particular error.
	Error Description	Alpha	40		Y*	This field will contain the English error description assigned to the error.
	Error ID	Alpha	5		Y*	This field will contain the 5 digit BST internal processing indicator. This field is unused by the customer.
* If number of errors >0						

03− SCHEDULE CHANGE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	109	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	3	Y	
21−22	Retry Indicator	ULONG	2 bytes	00−99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23−28	Interface Version	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is currently processing.
29−36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for the customer that BST is sending the message to.
37	Service Request Type	Alpha	1	I, T, D, C	Y	This field will contain the type of service request message that the BST schedule date pertains to. The valid request types that may have BST work scheduled are: I = Install T= Trouble Report D = Disconnect C = Change of Service
38−49	Service Request Number	Alpha	12		Y	This field will contain the service request number generated by the customer.
50−51	Service Request Version	Alpha	2	00−99	Y	This field is populated with the version number from the original message that required BST to schedule network activity.
52−81	Account ID	Alpha	30		Y	This field is populated with the account number from the original message that required BST to schedule network activity.
82−89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office that the subscriber receives the transport service from.

03– SCHEDULE CHANGE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
90–97	Employee ID	Alpha	8		Y	This field will contain the identification of BST's employee that is setting the BST schedule date.
98–104	Scheduled Date	Alpha	7	CYYMMDD	Y	This field will contain the scheduled date that BST will have the network portion of the subscriber's request completed.
105–108	Scheduled Time	Alpha	4	HHMM	Y	This field will contain the scheduled time that BST will have the network portion of the subscriber's request completed.
109	Customer Due Date Impacted	Alpha	1	Y, N	Y	This field will notify the customer if the BST schedule date will impact the due date and time that the customer committed to the subscriber. Y = Yes, the due date and due time are impacted. N = No, the due date and due time are not impacted.

04− READY FOR SERVICE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	175	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	4	Y	
21−22	Retry Indicator	ULONG	2 bytes	00−99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23−28	Interface Version	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is currently processing.
29−36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for the customer BST is sending the message to.
37	Service Request Type	Alpha	1	I, C	Y	This field will contain the original type of service request message that BST is reporting as ready for service. There are two valid service request types: I = Install C = Change of Service
38−49	Service Request Number	Alpha	12		Y	This field is populated with the service request number of the original request that BST is reporting as ready for service.
50−51	Service Request Version	Alpha	2	00−99	Y	This field is populated with the version number from the original message that BST is reporting as ready for service.
52−81	Account ID	Alpha	30		Y	This field is populated with the account number from the original message that BST is reporting as ready for service.
82−89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office that the subscriber receives the transport service from.

04− READY FOR SERVICE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
90−97	Employee ID	Alpha	8		Y	This field will contain the identification of BST's employee that is stating that the network is ready for service for this subscriber.
98−104	Date Installed	Alpha	7	CYYMMDD	Y	This field will contain the date that BST activated network service for this request.
105−108	Time Installed	Alpha	4	HHMM	Y	This field will contain the time that BST activated network service for this request.
109−158	Tap Location	Alpha	50		Y	This field will contain the physical location of the tap where this subscriber is connected.
159−160	Tap Port	Alpha	2	00 − 16	Y	This field will contain the port number on the tap where this subscriber is connected.
161−175	PC Service IP Address	Alpha	15		N	This field will contain the IP address assigned to this account for PC Services.

05− COMPLETION MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	1282	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	5	Y	
21−22	Retry Indicator	ULONG	2 bytes	00−99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23−28	Interface Version	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is currently processing.
29−36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for each Customer. This code will be assigned by BST.
37	Service Request Type	Alpha	1	I, C	Y	This field will contain the type of service request message that the completion message relates to. The two valid service request types are: I = Install C= Change of Service
38−49	Service Request Number	Alpha	12		Y	This field is populated with the service request number from the original message that requires BST to receive completion information.
50−51	Service Request Version	Alpha	2	00−99	Y	This field is populated by the customer with the version number of a particular instance of the request. The first time the request is sent the field is populated with 00. Any resend of the request is updated by one.
52−81	Account ID	Alpha	30		Y	This field is populated with the account number from the original message that requires BST to receive completion information.

05− COMPLETION MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
82−89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office that the subscriber receives the transport service from.
90−96	Date Completed	Alpha	7	CYYMMDD	Y	This field will contain the date that the customer closed the request.
97−100	Time Completed	Alpha	4	HHMM	Y	This field will contain the time that the customer closed the request.
101−102	Number of pieces of Subscriber Premise Equipment Installed	Alpha	2	00 − 50	Y	This field will contain the number of subscriber premise equipment that are being reported on this completion message. The maximum number of SPE items for a given message is 50.
103−1252	Subscriber Premise Equipment					Repeats 50 times
	Subscriber Premise Equipment Type	Alpha	1		Y*	This field will contain the subscriber SPE type. The current SPE items to be installed are: D = Digital SPE P = PC Services SPE A = Analog SPE O = Other
	SPE Customer Id	Alpha	8		Y*	This field will contain the unique identification code for the customer installing the SPE. This code is assigned by BST.
	Equipment Electronic Serial Number	Alpha	14		Y*	This field will contain the SPE's electronic serial number.
1253−1282	Customer Employee Name	Alpha	30		Y	This field will contain the identification of the customer's employee that initially took the subscriber's request.
* If number of pieces of Subscriber Premise Equipment installed > 0						

06− CHANGE OF SERVICE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	1380	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	6	Y	
21−22	Retry Indicator	ULONG	2 bytes	00−99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23−28	Interface Version	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is currently processing.
29−36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for each Customer. This code will be assigned by BST.
37	Service Request Type	Alpha	1	C	Y	This field will contain the type of service request message to be processed. The valid service request type is C for Change of Service.
38−49	Service Request Number	Alpha	12		Y	This field is populated with the service request number generated by the Customer.
50−51	Service Request Version	Alpha	2	00−99	Y	This field is populated by the customer with the version number of a particular instance of the request. The first time the request is sent the field is populated with 00. Any resend of the request is updated by one.
52−81	Account ID	Alpha	30		Y	This field is populated with the account number generated by the Customer originating the message. The account number should contain enough information so that the customer will be able to guide the BST message responses back to a given account in their system.

06− CHANGE OF SERVICE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
82−89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office that the subscriber receives the transport service from.
90−91	Number of Items Changed	Alpha	2	01 − 50	Y	This field will contain the number of products or SPE items that are being changed on a given change of service message. The maximum number of items that may be changed on a given message are 50.
92−1341	Items Changed					Repeats 50 times
	Item Type	Alpha	1	E, P	Y	This field will contain the item type that the customer is requesting to change. The item types are: E = Equipment (SPE) P = BST Product
	Action Code	Alpha	1	A, D	Y	This field will contain the action that BST is to apply to a given item. The valid actions are: A = Add D = Delete
	Subscriber Premise Equipment Type	Alpha	1		Y	This field will contain the SPE type. The valid types are: D = Digital SPE P = PC Services A = Analog SPE O = Other Blank = BST product
	Item ID	Alpha	14		Y	This field will contain the following values if the SPE type field is blank. unanalog = unscrambled analog scanalog = scrambled analog bdigital = broadcast digital nvod = near video on demand digital idigital = interactive digital pcsvc = PC Services other = Other products This field will contain the SPE's electronic serial number if the SPE type is not blank.
	Item Customer ID	Alpha	8		Y	This field will contain the unique identification code for the customer providing the item. This code is assigned by BST.

06− CHANGE OF SERVICE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
1342−1348	Scheduled Date of Change	Alpha	7	CYYMMDD	Y	This field will contain the due date that the customer's employee committed to the subscriber to have the request completed.
1349−1350	Scheduled Time of Change	Alpha	4	HHMM	Y	This field will contain the due time that the customer's employee committed to the subscriber to have the request completed.
1351−1380	Customer Employee Name	Alpha	30		Y	This field will contain the identification of the customer's employee that initially took the subscriber's request.

07− DISCONNECT MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	142	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	7	Y	
21−22	Retry Indicator	ULONG	2 bytes	00−99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23−28	Interface Version	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is currently processing.
29−36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for each Customer. This code will be assigned by BST.
37	Service Request Type	Alpha	1	D	Y	This field will contain the type of service request message to be processed. The valid service request type is D for Disconnect.
38−49	Service Request Number	Alpha	12		Y	This field is populated with the service request number generated by the Customer.
50−51	Service Request Version	Alpha	2	00−99	Y	This field is populated by the customer with the version number of a particular instance of the request. The first time the request is sent the field is populated with 00. Any resend of the request is updated by one.
52−81	Account ID	Alpha	30		Y	This field is populated with the account number generated by the Customer originating the message. The account number should contain enough information so that the customer will be able to guide the BST message responses back to a given account in their system.

07− DISCONNECT MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
82−89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office that the subscriber receives the transport service from.
90−96	Scheduled Date of Disconnect	Alpha	7	CYYMMDD	Y	This field will contain the disconnect date that the customer's employee committed to the subscriber to have the request completed.
97−100	Scheduled Time of Disconnect	Alpha	4	HHMM	Y	This field will contain the disconnect time that the customer's employee committed to the subscriber to have the request completed.
101	Disable Network	Alpha	1	Y, N	Y	This field will instruct BST whether or not to leave the network active for the customer at this address. Y = Disable the BST network for this customer at this address. N = BST is to leave the network active.
102−108	BST Actual Date of Disconnect	Alpha	7	CYYMMDD	N	This field will contain the actual disconnect date that BST deactivated the network.
109−112	BST Actual Time of Disconnect	Alpha	4	HHMM	N	This field will contain the actual disconnect time that BST deactivated the network.
113−142	Customer Employee Name	Alpha	30		Y	This field will contain the identification of the customer's employee that initially took the subscriber's request.

08− RECORD UPDATE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	285	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	8	Y	
21−22	Retry Indicator	ULONG	2 bytes	00−99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23−28	Interface Version	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is currently processing.
29−36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for each Customer. This code will be assigned by BST.
37	Service Request Type	Alpha	1	U	Y	This field will contain the type of service request message to be processed. The valid service request type is U for Record Update.
38−49	Service Request Number	Alpha	12		Y	This field is populated with the service request number generated by the Customer.
50−51	Service Request Version	Alpha	2	00−99	Y	This field is populated by the customer with the version number of a particular instance of the request. The first time the request is sent the field is populated with 00. Any resend of the request is updated by one.
52−81	Account ID	Alpha	30		Y	This field is populated with the account number generated by the Customer originating the message. The account number should contain enough information so that the customer will be able to guide the BST message responses back to a given account in their system.

08– RECORD UPDATE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
82–89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office that the subscriber receives the transport service from.
90–109	Subscriber First Name	Alpha	20		N*	This field will contain the first name of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.
110–129	Subscriber Last Name	Alpha	20		N*	This field will contain the last name of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.
130–139	Subscriber Home Phone	Alpha	10	NpaNxxLLLL	N*	This field will contain the home telephone number of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.
140–149	Subscriber Work Phone	Alpha	10	NpaNxxLLLL	N*	This field will contain the work telephone number of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.
150–155	Subscriber Work Extension	Alpha	6		N*	This field will contain the work telephone extension of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.
156–255	Customer Comments	Alpha	100		N*	This field will contain any information that the customer deems beneficial that BST should retain on their subscriber.
256–285	Customer Employee Name	Alpha	30		Y	This field will contain the identification of the customer's employee that initially took the subscriber's request.
* On a record update message, at least one of these fields must be populated with data to be changed on an account.						

09− CANCEL MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	119	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	9	Y	
21−22	Retry Indicator	ULONG	2 bytes	00−99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23−28	Interface Version	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is currently processing.
29−36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for each Customer. This code must match exactly to the install, restore, or trouble report that the customer would like to cancel.
37	Service Request Type	Alpha	1	C,D,I,T	Y	This field will contain the type of service request message to be processed. The valid service request types are: C = Change of Service D = Disconnect I = Install T = Trouble Report
38−49	Service Request Number	Alpha	12		Y	This field is populated with the service request number of the original install, restore, or trouble report that the customer would like to cancel. This number must match exactly.
50−51	Service Request Version	Alpha	2	00−99	Y	This field is populated by the customer with the version number of the original install, restore, or trouble report that the customer would like to cancel. This number must match exactly.

09− CANCEL MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
52−81	Account ID	Alpha	30		Y	This field is populated with the account number from the original install, restore, or trouble report that the customer is requesting to cancel. This account number must match exactly.
82−89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office of the original install, restore, or trouble report that the customer is requesting to cancel. This VSO must match exactly.
90−119	Customer Employee Name	Alpha	30		Y	This field will contain the identification of the customer's employee that initially took the subscriber's request.

10− TROUBLE REPORT MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	1171	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	10	Y	
21−22	Retry Indicator	ULONG	2 bytes	00−99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23−28	Interface Version	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is currently processing.
29−36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for each Customer. This code is assigned by BST.
37	Service Request Type	Alpha	1	T	Y	This field will contain the type of service request message to be processed. The trouble report will be a T.
38−49	Service Request Number	Alpha	12		Y	This field is populated with the service request number generated by the Customer. If the trouble report was initiated by BST, this field will contain the BST Trouble Ticket Number.
50−51	Service Request Version	Alpha	2	00−99	Y*	This field is populated by the customer with the version number of a particular instance of the report. The first time the report is sent the field is populated with 00. Any resend of the report is updated by one. This field will be blank if BST originates the report.

* Unless BST originates

10– TROUBLE REPORT MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
52–81	Account ID	Alpha	30		Y*	This field is populated with the account number generated by the Customer originating the message. This field will be blank if BST originates the report.
82–89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office that the subscriber receives the transport service from.
90–97	Priority Code	Alpha	8	See Attachment 2	Y	This field contains the level of priority assigned to a service request for scheduling and delivery.
98–104	Reported Date	Alpha	7	CYYMMDD	Y	This field will contain the original date the trouble report was placed by the subscriber to the customer. If the report is originated by BST, this date will be the date the network determined a problem existed.
105–108	Reported Time	Alpha	4	HHMM	Y	This field will contain the original time the trouble report was placed by the subscriber to the customer. If the report is originated by BST, this time will be the time the network determined a problem existed.
109–115	Date Due	Alpha	7	CYYMMDD	Y*	This field will contain the due date that the customer's employee committed to the subscriber to have the trouble cleared. This field will be blank if BST initiated the report.
116–119	Time Due	Alpha	4	HHMM	Y*	This field will contain the due time that the customer's employee committed to the subscriber to have the trouble cleared. This field will be blank if BST initiated the report.
120–149	Customer Employee Name	Alpha	30		Y	This field will contain the identification of the customer's employee that initially took the subscriber's trouble report.
150–549	Trouble Description	Alpha	400		Y**	This field will be populated by the customer with the description of the trouble. May be blank if BST originated.

* Unless BST originates
** If message originates from customer

10− TROUBLE REPORT MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
550−551	Number of Details following	Alpha	2	00 − 20	Y	This field will contain 00 if the customer originates the trouble report. This field will contain the number of specific equipment details for the given trouble report. BST may report a maximum of 20 equipment items with one trouble report message.
552−1171	Details					May repeat up to 20 times if BST originated. Blank if customer originated.
	Equipment Type	Alpha	1	A, S, E, N, O	Y***	This field contains the BST network equipment items that are affected. The current items to be reported are: A = Amplifier S = Video Serving Office (VSO) E = Subscriber Account N = Node O = Other
	Equipment/Account affected	Alpha	30		Y***	This field will contain the network equipment affected or the customer's account numbers that are affected.
*** If number of details following is > 0						

11– TROUBLE REPORT RESOLUTION MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1–4	Size of Buffer Sent	ULONG	4 bytes	120	Y	
5–8	Size of Message Header	ULONG	4 bytes	20	Y	
9–12	Check Value	ULONG	4 bytes		N	Unused by customer
13–16	Message Type	ULONG	4 bytes	10	Y	
17–20	Message ID	ULONG	4 bytes	11	Y	
21–22	Retry Indicator	ULONG	2 bytes	00–99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23–28	Interface Version	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is currently processing.
29–36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for each Customer. This code is assigned by BST.
37	Service Request Type	Alpha	1	T	Y	This field will contain the type of service request message to be processed. The trouble report resolution will be a T.
38–49	Service Request Number	Alpha	12		Y	This field is populated with the service request number generated by the Customer. If the trouble report was initiated by BST, this field will contain the BST Trouble Ticket Number.
50–51	Service Request Version	Alpha	2	00–99	Y	This field is populated by the customer with the version number of a particular instance of the request. The first time the request is sent the field is populated with 00. Any resend of the request is updated by one. This field will be blank if BST originated the trouble report request.

11– TROUBLE REPORT RESOLUTION MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
52–81	Account ID	Alpha	30		Y	This field is populated with the account number generated by the Customer originating the message. This field will be blank if BST originates the report.
82–89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office that the subscriber receives the transport service from.
90–96	Resolution Date	Alpha	7	CYYMMDD	Y	This field will contain the resolution date that the trouble was resolved.
97–100	Resolution Time	Alpha	4	HHMM	Y	This field will contain the resolution time that the trouble was resolved.
101–120	Resolution Description	Alpha	20	See Attachment 3	Y	This field will contain a short description of the resolution to the trouble report.

12− QUERY MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	181	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	12	Y	
21−22	Retry Indicator	ULONG	2 bytes	00−99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23−28	Interface Version	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is currently processing.
29−36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for each Customer. This code will be assigned by BST.
37	Service Request Type	Alpha	1	Q	Y	This field will contain the type of service request message to be processed. The valid request type is Q for Query.
38−49	Service Request Number	Alpha	12		Y	This field is populated with the service request number generated by the Customer.
50−51	Service Request Version	Alpha	2	00−99	Y	This field is populated by the customer with the version number of a particular instance of the request. The first time the request is sent the field is populated with 00. Any resend of the request is updated by one.
52−81	Account ID	Alpha	30		Y	This field is populated with the account number generated by the Customer originating the message. The account number should contain enough information so that the customer will be able to guide the BST message responses back to a given account in their system.

12− QUERY MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
82−89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office that the subscriber receives the transport service from.
90	Type of Query	Alpha	1	A, S	Y	This field will contain the type of query the customer would like to investigate. The valid query types are as follows: A = Subscriber account S = Pending Service Request
	Service Request to Query					If a pending service request is to be queried, all six query fields must be populated. If a subscriber account is to be queried, the service request number and service request version id query fields are not required and should be left blank.
91−98	Query Customer ID	Alpha	8		Y	This field will contain the unique identification code for the customer that should be queried.
99	Query Service Request Type	Alpha	1	I, T, D, C	Y*	This field will contain the type of service request message to be processed. This field will contain an I for install, D for disconnect, C for change of service, or T for trouble report. If the query is for a subscriber account, this field will be blank
100−111	Query Service Request Number	Alpha	12		Y*	The field will contain the service request number of the query. If the query is for a subscriber account, this field will be blank.
112−113	Query Service Request Version ID	Alpha	2	00−99	Y*	This field will contain the version number of the service request to be queried. If the query is for a subscriber account, this field will be blank.
114−143	Query Account ID	Alpha	30		Y	This field will contain the account number of the subscriber account to be queried.
144−151	Query VSO	Alpha	8		Y	This field will contain the BST Video Serving Office of the query.
152−181	Customer Employee Name	Alpha	30		Y	This field will contain the identification of the customer's employee that initally took the subscriber's request.
* If Type of Query = S						

13− PENDING SERVICE REQUEST QUERY RESPONSE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	201	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	13	Y	
21−22	Retry Indicator	ULONG	2 bytes	00−99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23−28	Interface Version	Alpha	6	B	Y	This field will contain the version number of the administrative document that the customer is processing on the query service request.
29−36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for the Customer on the pending service request.
37	Service Request Type	Alpha	1	Q	Y	This field will contain the type of service request message to be processed. The valid service request type for BST's response to a query is Q.
38−49	Service Request Number	Alpha	12		Y	This field is populated with the pending service request number that was requested in the query.
50−51	Service Request Version	Alpha	2	00−99	Y	This field is populated with the pending version number requested in the query by the customer.
52−81	Account ID	Alpha	30		Y	This field is populated with the account number of the pending request.
82−89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office that the pending service request contains.
90−189	Customer Comments	Alpha	100		N	This field contains the information that the customer deemed beneficial to BST on the pending service request that has been queried.

13– PENDING SERVICE REQUEST QUERY RESPONSE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
190–196	Due Date	Alpha	7	CYYMMDD	Y	This field contains the scheduled date that BST has committed to complete the pending service request being queried.
197–200	Due Time	Alpha	4	HHMM	Y	This field contains the scheduled time that BST has committed to complete the pending service request being queried.
201	Customer Due Date Impacted	Alpha	1	Y, N	Y	This field contains the customer due date impacted indicator from the pending service request being queried. This field notifies the customer if the BST scheduled date will impact the due date and time that the customer committed to the subscriber. The values are: Y = Yes, the due date and due time are impacted. N = No, the due date and due time are not impacted.

14− END SUBSCRIBER QUERY RESPONSE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	2436	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	14	Y	
21−22	Retry Indicator	ULONG	2 bytes	00−99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23−28	Interface Version	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is processing.
29−36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for the Customer that requested the query.
37	Service Request Type	Alpha	1	Q	Y	This field will contain the type of service request message to be processed. The valid service request type for BST's response to a query is Q.
38−49	Service Request Number	Alpha	12		N	This field will be blank on this message.
50−51	Service Request Version	Alpha	2	00−99	N	This field will be blank on this message.
52−81	Account ID	Alpha	30		Y	This field is populated with the account number.
82−89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office of the account that is being queried.
90−109	Subscriber First Name	Alpha	20		N	This field will contain the first name of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.

14− END SUBSCRIBER QUERY RESPONSE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
110−129	Subscriber Last Name	Alpha	20		N	This field will contain the last name of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.
130−139	Subscriber Home Phone	Alpha	10	NpaNxxLLLL	N	This field will contain the home telephone number of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.
140−149	Subscriber Work Phone	Alpha	10	NpaNxxLLLL	N	This field will contain the work telephone number of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.
150−155	Subscriber Work Extension	Alpha	6		N	This field will contain the work telephone extension of the person to contact if BST should need to have subscriber contact during a subscriber premise visit.
156−255	Customer Comments	Alpha	100		N	This field will contain any information that the customer deemed that BST should retain on their subscriber.
	Service Address					This field will contain the service address of the customer account that is receiving network services.
256−267	Service Address Key	Alpha	12		N	This field will contain the unique key for the service address of the customer account.
268−280	Street Number	Alpha	13		Y	
281−340	Street Name	Alpha	60		Y	
341−355	Structure	Alpha	15		N	
356−370	Unit	Alpha	15		N	
371−385	Elevation	Alpha	15		N	
386−417	City	Alpha	32		Y	
418−419	State	Alpha	2		Y	This field will contain the two character state abbreviation.
420−430	Zip	Alpha	11		Y	This field will contain the zip code+4+2 where appropriate.
431−432	Number of Products Subscribed	Alpha	2	1−50	Y	This field will contain the number of products that are active on this account. The maximum number of products for a given message is 50.

14− END SUBSCRIBER QUERY RESPONSE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
433−1232	Products Subscribed to					Repeats 50 times
	Product	Alpha	8		Y*	This field will contain the subscriber product requested for network service activation. The current products available are: unanalog = unscrambled analog scanalog = scrambled analog bdigital = broadcast digital nvod = near video on demand digital idigital = interactive digital pcsvc = PC Services other = Other products
	Product Customer Id	Alpha	8		Y*	This field will contain the unique identification code for the customer providing the product.
1233−1282	Tap Location	Alpha	50		N	This field will contain the physical location of the tap where this subscriber is connected.
1283−1284	Tap Port	Alpha	2	00 − 16	N	This field will contain the port number on the tap where this subscriber is connected.
1285−1286	Number of pieces of Subscriber Premise Equipment Installed	Alpha	2	00 − 50	Y	This field will contain the number of subscriber premise equipment items that are being reported on this query message. The maximum number of SPE items for a given message is 50.
1287−2436	Subscriber Premise Equipment					Repeats 50 times
	Subscriber Premise Equipment Type	Alpha	1	A,D,O,P	Y**	This field will contain the subscriber SPE type. The current SPE items to be installed are: D= Digital SPE P = PC Services SPE A = Analog SPE O = Other
	SPE Customer Id	Alpha	8		Y**	This field will contain the unique identification code for the customer installing the SPE. This code is assigned by BST.
	Equipment Electronic Serial Number	Alpha	14		Y*	This field will contain the SPE's electronic serial number.

* If number of products subscribed is > 0

** If number of Subscriber Premise Equipment Installed is > 0

15− PENDING TROUBLE REPORT QUERY RESPONSE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	199	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	15	Y	
21−22	Retry Indicator	ULONG	2 bytes	00−99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23−28	Version Number	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is processing.
29−36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for each Customer. This code is assigned by BST.
37	Service Request Type	Alpha	1	Q	Y	This field will contain the type of service request message to be processed. The valid service request type for BST's response to a query is Q.
38−49	Service Request Number	Alpha	12		Y	This field is populated with the pending service request number that was requested in the query.
50−51	Service Request Version	Alpha	2	00−99	Y	This field is populated with the pending version number requested in the query by the customer.
52−81	Account ID	Alpha	30		Y	This field is populated with the account number of the pending request.
82−89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office that the pending service request contains.
90−97	Priority Code	Alpha	8	See Attachment 2	Y	This field contains the level of priority assigned to a service request for scheduling and delivery.

15− PENDING TROUBLE REPORT QUERY RESPONSE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
98−104	Reported Date	Alpha	7	CYYMMDD	Y	This field will contain the original date the trouble report was placed by the subscriber to the customer. If the report is originated by BST, this date will be the date the network determined a problem existed.
105−108	Reported Time	Alpha	4	HHMM	Y	This field will contain the original date the trouble report was placed by the subscriber to the customer. If the report is originated by BST, this date will be the time the network determined a problem existed.
109−115	Due Date	Alpha	7	CYYMMDD	Y*	This field will contain the due date that the customer's employee committed to the subscriber to have the trouble cleared. This field will be blank if BST initiated the report.
116−119	Time Due	Alpha	4	HHMM	Y*	This field will contain the due date that the customer's employee committed to the subscriber to have the trouble cleared. This field will be blank if BST initiated the report.
120−149	Customer Employee Name	Alpha	30		Y	This field will contain the identification of the customer's employee that initially took the subscriber's trouble report.
150−156	Scheduled Date	Alpha	7	CYYMMDD	N	This field will contain the scheduled date that BST will have the network portion of the subscriber's trouble completed. This field will be populated only if this date is different from the Date Due.
157−160	Scheduled Time	Alpha	4	HHMM	N	This field will contain the scheduled time that BST will have the network portion of the subscriber's trouble completed. This field will be populated only if the time is different from the Time Due.
161−168	Report Status	Alpha	8	Pending Cancel Complete	Y	This field will contain the current BST status of the pending trouble report for the given query.
* Unless BST originated trouble report						

15− PENDING TROUBLE REPORT QUERY RESPONSE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
169−175	Resolution Date	Alpha	7	CYYMMDD	N	This field will only be populated if the status is complete. The field will contain the resolution date that the trouble was resolved.
176−179	Resolution Time	Alpha	4	HHMM	N	This field will only be populated if the status is complete. This field will contain the resolution time that the trouble was resolved.
180−199	Resolution Description	Alpha	20	See Attachment 3	N	This field will only be populated if the status is complete. This field will contain a short description of the resolution to the trouble report.

16− BST RECORD UPDATE SERVICE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	253	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	16	Y	
21−22	Retry Indicator	ULONG	2 bytes	00−99	Y	This field will contain the Retry or resend number of the message being transmitted.
	Message Key					The message key consists of the following required fields: Version Number, Customer ID, Service Request Type, Service Request Number, Service Request Version, Account ID, and VSO.
23−28	Version Number	Alpha	6	B	Y	This field will contain the current version number of the administrative document that the customer is processing.
29−36	Customer ID	Alpha	8		Y	This field will contain a unique identification code for the customer BST is sending the message to.
37	Service Request Type	Alpha	1	I, C	Y	This field will contain the original type of service request message that BST is reporting the record change to if applicable. The two valid service request types are: I = Install C = Change of Service
38−49	Service Request Number	Alpha	12		Y	This field is populated with the service request number of the original request that BST is reporting the record change on.
50−51	Service Request Version	Alpha	2	00−99	Y	This field is populated with the version number from the original message that BST is reporting the record change on.
52−81	Account ID	Alpha	30		Y	This field is populated with the account number from the original message that BST is reporting the record change on.
82−89	VSO	Alpha	8		Y	This field will contain the BST Video Serving Office that the subscriber receives the transport service from.

16− BST RECORD UPDATE SERVICE MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
90−97	Employee ID	Alpha	8		Y	This field will contain the identification of BST's employee that is stating that the record change is needed.
98−104	Deactivate Date Installed	Alpha	7	CYYMMDD	N*	This field will contain the date that BST is no longer showing as ready for service.
105−108	Deactivate Time Installed	Alpha	4	HHMM	N*	This field will contain the time that BST is no longer showing as ready for service.
109−158	Delete Tap Location	Alpha	50		N*	This field will contain the current physical location of the tap for this subscriber that should be deleted.
159−160	Delete Tap Port	Alpha	2	00−16	N*	This field will contain the current port number on the tap for this subscriber that should be deleted.
161−175	Delete PC Service IP Address	Alpha	15		N*	This field will contain the IP address for PC Services that should be deleted from this account.
176−182	Activate Date Installed	Alpha	7	CYYMMDD	N*	This field will contain the new date that BST will activate the account as ready for service.
183−186	Activate Time Installed	Alpha	4	HHMM	N*	This field will contain the new time that BST will activate the account as ready for service.
187−236	Add Tap Location	Alpha	50		N*	This field will contain the new physical location of the tap for this subscriber.
237−238	Add Tap Port	Alpha	2	00−16	N*	This field will contain the new port number on the tap for this subscriber.
239−253	Add PC Service IP Address	Alpha	15	00−16	N*	This field will contain the new IP address for PC services for this account.
* On a record update message, at least one of these fields must be populated with data to be changed on an account.						

99− LOGIN MESSAGE						
Field Position	**Field Name**	**Field Type**	**Field Length**	**Values**	**Data Required**	**Description**
	Message Header					
1−4	Size of Buffer Sent	ULONG	4 bytes	48	Y	
5−8	Size of Message Header	ULONG	4 bytes	20	Y	
9−12	Check Value	ULONG	4 bytes		N	Unused by Customer
13−16	Message Type	ULONG	4 bytes	10	Y	
17−20	Message ID	ULONG	4 bytes	99	Y	
21−28	Customer ID	Alpha	8		Y	This field will contain a unique identification code for each Customer. This code will be assigned by BST.
29−36	Login ID	Alpha	8		Y	This field will contain a unique login id for each customer. This code will be assigned by BST.
37−48	Login Password	Alpha	12		Y	This field will contain a unique login password for each customer. This code will be assigned by BST.

6. References

Document Number	Title
1. ANSI/IEEE Std. 802.3	"Information technology – Local and metropolitan area networks – Part 3: Carrier sense multiple access with collision detection access method and physical layer specifications", 4th edition, 1993–07–08
2. ANSI/IEEE Std. 802.2	"Information processing systems – Local area networks Part 2: Logical link control", 1989, 12–31
3. RFC–791	"Internet Protocol – DARPA Internet Program Protocol Specification", USC/Information Sciences Institute, September, 1991
4. RFC–792	"Internet Control Message Protocol – DARPA Internet Program Protocol Specification", USC/Information Sciences Institute, September, 1991
5. RFC–793	"Transmission Control Protocol – DARPA Internet Program Protocol Specification", USC/Information Sciences Institute, September 1981
6. – – – – – – – –	"UNIX Programmer's Reference Manual (PRM)", 4.3 Berkeley Software Distribution, Computer Science Div., University of California, Berkeley, CA., April 1986

ATTACHMENT 1

01 − INSTALL MESSAGE AND 15 − RESTORE MESSAGE
Priority Field Alpha Values

VALUE	DESCRIPTION
RUSH	Service request requires immediate attention (less than 1 day)
CAMPAIGN	Marketing promotion − request requires special attention (i.e., instant installs)
CO−VISIT	BST and customer must be at the subscriber premise at the same time
ROUTINE	Normal processing mode − Service request due within two days
LOW	Service request due in 3 or more days

ATTACHMENT 2

10 − TROUBLE MESSAGE REPORT
Priority Field Alpha Values

VALUE	DESCRIPTION
HOT	Irate customer
URGENT	Trouble requires immediate attention − customer is out of service
CO−VISIT	Trouble requires BST and customer to be at the subscriber premise at the same time
MINOR	Service affecting trouble − Customer has some level of service
WARNING	Information only or potential for trouble
ROUTINE	Customer report of irregular BST plant condition

ATTACHMENT 3

11 − TROUBLE REPORT RESOLUTION MESSAGE
Resolution Description Alpha Code

SRVC_REQUEST_ERROR
SRVC_REQUEST_CMPLT
REQUEST_CANCELLED
SUBSCRIBER_NIU
PREMISE_PROTECTION
SUBSCRIBER_DROP
SUBSCRIBER_PREMISE
BST_NETWORK_OSP
TEST_OK_NO_DISPATCH
FOUND_OK
PREMISE_WIRING_BILL
PREMISE_WIRE_NO_BILL
SET_TOP_BOX_ANALOG
SET_TOP_BOX_DIGITAL
SUBSCRIBER_OTHER
L2_ANALOG_FEED
L2_DIGITAL_FEED
L2_SYSTEMS
L2_NETWORK_OTHER
OPTIC_TERMINAL
OPTIC_TERM_PLUG−INS
COAXIAL_CABLE
POWER_FAILURE
AMPLIFIER
SPLITTER/COUPLER
TAP
LOOP_ELECTRONICS
NETWORK_PROTECTION
SYNCHRONIZATION
DISTRIBUTION_NTWK
L1_CROSS_CONNECT
CO_CABLING_OTHER
ATM_SWITCH
BROADBAND_GATEWAY
MODULATOR/DEMOD
UP_CONVERTER
COMBINER/SPLITTER
MONITOR_EQUIPMENT
SIGNALING_EQPT
CENTRAL_OFFICE_OTHER
L2/VCO_TRANSPORT
VCO/VSO_TRANSPORT
VSO/VSO_TRANSPORT
L1_INTEROFFICE
L1_DCN_(LAN)
L1_DCN_(WAN)
L1_DCN_CABLE/WIRE
L1_LEASED_LINES
L1_DCN
L1_PCSVCS_EQPT
L2_PCSVCS_EQPT