NETWORK SERVICE PROVIDER (NSP) GUIDE FOR INTERFACING WITH DSL TIER 2 (FORMERLY ATST - CORE) VERSION 15

This guide applies to AT&T's Wholesale DSL service in its franchise territory in Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee (the former BellSouth territory). This guide periodically contains changes and will be shown in red font, except for the URLs which are shown in blue font.

Note: The effective date of the changes is 04/03/17
- Updated NSP Guide revision from 14 to 15
- Revised Section 3.1 The Service Request Process – updated BBCCD method of communications
- Revised Section 3.2 Guidelines for Network Service Provider Support Form BBCCD – updated BBCCD method of communications
- Revised Section 3.2.2 Determining Reason for Rejected Request Forms – updated BBCCD method of communications
- Revised Section 3.2.3 Submitting Request When DSL Is Already On Line – updated BBCCD method of communications
- Revised Section 3.2.4 Dispute Process Involving Letters of Authorization – updated BBCCD Hours of Operations and method of communications
- Revised Section 3.2.5 Understanding PAST DUE Status – updated BBCCD method of communications
- Revised Section 3.2.6 Understanding “PENDING FACILITY” – updated BBCCD method of communications
- Revised Section 3.2.7 Handling Erroneous Disconnects of DSL Service – updated BBCCD Hours of Operations and method of communications
- Revised Section 3.3 BBCCD Escalation Procedures – updated BBCCD Hours of Operations and method of communications
Section 1. Introduction

The DSL Tier 2 organization (formerly Advanced Technical Support Team – ATST - Core) consists of two support groups to assist in ordering and maintaining DSL services. These groups are Broadband Customer Care Delivery (BBCCD) and DSL Tier 2.

BBCCD handles the process of accepting your Request Form (RF) and turning the RF into the various actions needed to provision the service to your end-user customer. BBCCD is responsible for following your request and making sure that all the work groups in AT&T fulfill the request in a timely and complete manner.

While most of the ordering process is fully automated, BBCCD personnel handle the special cases. They are available to assist you in submitting an RF and in answering any questions you may have about the status of the RF if it is in other than “COMPLETE” status in the Service Order Entry Gateway (SOEG) system. Most questions about the RF can be answered by referencing SOEG located at https://dslorder.wholesale.att.com. Service Provisioning is indicated by an RF status of “COMPLETE”.

Following service provisioning, DSL Tier 2 will handle maintenance requests to resolve technical difficulties. The DSL Tier 2 is available to you as a second tier help desk to assist in the troubleshooting of suspected service problems, during initial installation and thereafter.

AT&T thanks you for your continued support of AT&T Services. We strive to provide the best possible service with honesty and integrity. In order to do so, we constantly seek ways to improve quality levels in customer interaction. This guide has been developed to assist you in obtaining the most effective support from BBCCD and DSL Tier 2 organizations. It is not meant to replace other documentation that is available to you. Specifically,

- The “Service Order Entry Gateway (SOEG) User’s Guide” (Downloadable from the SOEG website at https://dslorder.wholesale.att.com.)

Please take a moment to look through the attached guide, so that you will understand how we can best assist you in providing service to your customer.
Section 2. Table of Contents

Section 1. Introduction ........................................................................................................ ii
Section 2. Table of Contents ............................................................................................... iii
Section 3. Broadband Customer Care Delivery (BBCCD) ............................................ 1
   Section 3.1 The Service Request Process ..................................................................... 1
   Section 3.2 Guidelines for Network Service Provider Support Form BBCCD ........ 2
      Section 3.2.1 Prerequisites and Contact Tips ......................................................... 3
      Section 3.2.2 Determining Reason for Rejected Request Forms ......................... 3
      Section 3.2.3 Submitting Request When DSL Is Already On Line ..................... 3
      Section 3.2.4 Dispute Process Involving Letters of Authorization ..................... 4
      Section 3.2.5 Understanding PAST DUE Status ................................................... 4
      Section 3.2.6 Understanding “PENDING FACILITY" Status ............................... 5
      Section 3.2.7 Handling Erroneous Disconnects of DSL Service ....................... 6
      Section 3.2.8 Service Order Entry Gateway – “Held for Cancel” Status ............. 7
      Section 3.2.9 False Positive Procedure .................................................................. 7
      Section 3.2.10 SOEG “End of Service Notification” RFs ................................. 7
      Section 3.2.11 Notification of TN Changes ........................................................... 9
      Section 3.2.12 Memo Notifications ...................................................................... 9
   Section 3.3 BBCCD Escalation Procedures (Service Requests/Orders) .................... 9
   Section 3.4 Company Holidays ................................................................................. 11
Section 4. DSL Tier 2........................................................................................................ Error! Bookmark not defined.
   Section 4.1 Guidelines for DSL Tier 2 Network Service Provider (NSP) Support .... 12
      Section 4.1.1 General Philosophy .......................................................................... 12
      Section 4.1.2 Pre-requisites and Contact Tips ...................................................... 12
      Section 4.1.3 Test and Troubleshooting Information .......................................... 14
      Section 4.1.4 Process for Troubleshooting DSL Problems ................................ 14
      Section 4.1.5 Isolate and Test at the NID for No Sync Problems ....................... 16
      Section 4.1.6 EBTA GUI ...................................................................................... 17
   Section 4.2 DSL TIER 2 Escalation Procedures ...................................................... 19
Section 5. DSL Synchronization Status ........................................................................ 20
   Section 5.1 Specific Information to Be Provided .................................................... 21
   Section 5.2 What Are Acceptable Parameters? ....................................................... 21
   Section 5.3 Technology Summary ............................................................................ 21
   Section 5.4 How Can I Use This Information? ....................................................... 22
Section 6. Disaster Preparedness and Response: ....................................................... 23
Section 7. Glossary ........................................................................................................... 23
Section 3. Broadband Customer Care Delivery (BBCCD)

Section 3.1 The Service Request Process

The current service request process is summarized below and includes changes previously announced in DSL bulletins. However, going forward, planned enhancements within our systems make the procedures located in this document subject to change. Please be sure to read the NSP Bulletins for these changes.

The Service Order Entry Gateway (SOEG) provides web-enabled access to a database which tracks New, Change, Update, Cancel and/or Disconnect Requests for DSL service. When you input a Request Form (RF) via the gateway, it is reflected in this database. SOEG also provides End of Service Notifications (EOSNs) to the NSP when a change has occurred that disconnects their service from this NSP (e.g. POTS disconnects or changing service to a different NSP). A “Change Notification” request type will be generated when your existing DSL end-user changes their phone number. SOEG also has the capability for Customer Service Associates (CSAs) to input a Memo Notification on an order to provide the NSP with supplemental information regarding the order. You may check the status of your request at any time through the web interface or through the use of a XML/SOAP interface to this site.

When your RF is first entered into the database, it passes through some syntax edits and, if validated, is assigned a “SUBMITTED” status. If the RF fails these edits, it will be immediately rejected for resubmission after correction. In “SUBMITTED” status, the RF then passes through systems that perform extensive edits of the data to ensure that the request can be processed. Upon successfully passing these edits, a Service Order (an internal AT&T document) is issued, and the Service Order Number and the due date are established and posted to the RF in the SOEG database. The RF is then updated to a status of “PROCESSED”. Please allow 4 hours for the SRF to be processed before calling to inquire, however, an exception will be made for any disconnects in error. In some cases, the request will fail the edits and be rejected and the database status for the RF will be updated to “REJECTED”. The NSP must then resubmit a correct RF. An example of this situation would be in the case where an NSP submitted an order with an incorrect Address. This order will be rejected and the SRF will need to be resubmitted with the correct Address.

In most cases, the RF will stay in “PROCESSED” status until the Service Order due date. However, prior to this time, we may determine that we cannot physically provision DSL on the end-user’s line. This happens infrequently. However, it may occur when our network database does not correctly represent the physical makeup of the line. In this case, the RF status will be updated to "HELD FOR CANCEL". These RFs will stay in HELD FOR CANCEL status for 24 hours before they move into "CANCELLED" status. In some cases, we find that we can provision the service, but that construction must be completed to enable this provisioning. If this construction will cause a delay in the due date for the service, the RF status will be updated to “Pending Facilities” and the estimated service date (ESD) will be reflected in the CURRENT DUE DATE field and added to the NSP REMARKS field in the SOEG database. This update will usually be posted within 3 business days of the change in RF status to “Pending Facilities” (PF). This will allow the NSP to plan/adjust their installation and/or equipment delivery activities accordingly. If the new ESD is not posted on the order within 3 days after the due date, then it will be escalated to engineering.
Otherwise, on the day of the Current AT&T Due Date, the RF status will be reviewed and updated. In general, this status is changed to “COMPLETE” indicating that the customer’s line has been provisioned with DSL, and that all of the testing has been completed. In some cases, the work necessary to provision DSL may not be completed by the due date. When this occurs, the RF status is changed to “PAST DUE” for special handling. When an RF is in “PAST DUE” status, the request is overdue, and the Current Due Date will continue to show this overdue state. The “PAST DUE” status is an indication that this RF has been escalated internally to clear the problem. Please allow 1 business day for this condition to be addressed prior to making inquiries to BBCCD.

An RF may also be in a “MISSED APPOINTMENT” status. The “MISSED APPOINTMENT” status is an indication that the tech was unable to finish the professional install or the sync order all together. There may be a need for renegotiation with a due date by the NSP with the customer. If there are notes regarding needing a new due date – the NSP can submit an UPDATE request to move the due date.

An RF may also be in a “HELD” status. There are several reasons for “HELD” that involves a pending order to install phone service. The DSL cannot be installed until the phone service is installed. The NSP may need to inform the customer that their order for phone service is being delayed and they may need to call into the company providing their phone service to inquire about the status.

Please Note: Do not attempt NSP installation until after the SOEG database reflects a “COMPLETE” status. This will eliminate unnecessary dispatches or frustration on the part of the “self-install” customer resulting from the equipment being connected prior to service completion.

The BBCCD (m31780@att.com) is the point of contact for information about the request until its status is “COMPLETE” in SOEG. You will be connected to a representative who will respond to your inquiry concerning a non-completed request. This response includes researching the reasons for, and updating the ESD, on overdue orders.

After the SOEG database shows the request status as “COMPLETE”, any service problems should be referred to DSL Tier 2. DSL Tier 2 can be reached at 888-701-2375, option #3. For additional information about addressing repair issues, refer to Error! Reference source not found.

Section 3.2 Guidelines for Network Service Provider Support Form BBCCD

This guide is intended to cover the interaction and expectations for typical inquiries and requests that are made to BBCCD. BBCCD is the primary contact for all inquiries related to Request Forms (RF) that do not reflect a “COMPLETE” Status. BBCCD can be reached via email at m31780@att.com. When the BBCCD is contacted, the Customer Service Associate (CSA) is responsible for contacting the correct department on your behalf to resolve any issue. The following information is provided to facilitate a more effective and productive contact with BBCCD.
Section 3.2.1 Prerequisites and Contact Tips

- Please allow for the appropriate time interval to elapse, as agreed upon with AT&T, and documented herein.
- Review the Service Order Entry Gateway (SOEG) system for the most current information and status prior to calling the DSL BBCCD.
- Please have Request Form ID(s) ready.
- Please have correct DSL phone number ready.

Section 3.2.2 Determining Reason for Rejected Request Forms

AT&T’s goal is to ensure your requests are processed smoothly and your end-user customer receives service in a timely manner. Therefore, we have built edits into the service request process to ensure the integrity of the Request Form data. Request Forms may be rejected if information cannot be used to create or update an AT&T Service Order (an internal document). The reason will be noted on the RF in the Reject Reason Field. Reject Reasons should be self-explanatory, however, if the NSP should have any questions, they can call into BBCCD and a CSA will be able to provide additional clarification.

Contact BBCCD via email at m31780@att.com if:

- The reject reason is unclear or not available in the Reject Reason and/or NSP Remarks field of the request form. If CSA is unable to determine the reason for the reject, then an investigation is required. The CSA will update the RF with findings within 1 business day.
- The RF is not updated within 1 business day with appropriate status; in this event, escalation procedures may be initiated.

Section 3.2.3 Submitting Request When DSL Is Already On Line

The loop qualification database currently will qualify any telephone number that has DSL on line. When a “new” request is submitted to the Service Order Entry Gateway (SOEG) on a circuit with existing DSL service with a different DSL service provider, the request will be accepted with the assumption that the submitting NSP has, on file, the necessary Letter of Authorization (LOA) executed by the end-user customer. AT&T will honor the request, and switch the end-user to the new NSP. All requests for new service must be submitted on a “new” request form in SOEG.

When a “new” request is submitted to SOEG on a telephone number that has a pending order for DSL, the request will be placed in "Held for LOA". There is no reason to open an LOA dispute on this TN as it will not speed up the process, and may actually slow down the process if the TN is in an area where facilities are limited. If the NSP will wait until the pending order completes, the "Held for LOA" request will change to a Processed Status, and will flow as a NSP change with the same day due date.

Contact BBCCD via email at m31780@att.com if:

- The RF is not processed within 4 hours of submitting the request for DSL service and the NSP remarks do not indicate the reason for the delay.
Section 3.2.4 Dispute Process Involving Letters of Authorization

NOTE: Effective April 3, 2017, BBCCD office hours are being changed to the following:

- From:
  - Sunday          CLOSED
  - Monday – Friday  8:00am – 7:00pm (ET)
  - Saturday        8:00am – 4:30pm (ET)

- To:
  - Sunday          CLOSED
  - Monday – Saturday 8:00am – 10:00pm (ET)

If an NSP discovers that an end-user has been moved without the end-user’s authorization or the NSP believes its request should not have been rejected, the NSP should first contact the end-user to determine that end-user’s wishes. If the NSP believes a mistake has been made in moving the end-user to another NSP, they should contact BBCCD (email: m31780@att.com). Do this even in the event that the NSP discovered the problem during the course of working an end-user trouble with DSL Tier 2. DSL Tier 2 is unable to assist the NSP in resolving this type of dispute. If this issue is discovered during BBCCD’s normal business hours (Monday - Saturday, 8:00am-10:00pm ET), the NSP should contact BBCCD via email at m31780@att.com.

Upon notification of a dispute issue, BBCCD will request both NSPs send a copy of the end-user’s LOA (by email: DSG.OSC@att.com, or fax: 925-242-1124, or delivery to AT&T DSG, 2600 Camino Ramon, Room# 2N105C, San Ramon, CA 94583) to the center before the end of the next business day. The NSP will be given specific faxing instructions and information requirements by BBCCD. AT&T will provision the service to the NSP that provides AT&T with the most recent LOA, as determined by the date of the letter executed by the end-user. While the dispute is underway, the user will be provisioned/re-provisioned back to the original NSP upon receipt of a current LOA. The NSPs will be notified of the results within one business day after the LOAs are received.

(i) Charges

Where an NSP has caused an end-user to be moved without a valid LOA, AT&T will move the end-user back to the original NSP. In this situation, any termination liability applied to the original NSP will be reversed. AT&T will charge the NSP that caused the re-provisioning the ordinary installation fees, and will not credit those fees if the end-user is moved back to the original NSP. Termination charges will also be assessed to the NSP that caused the end-user move without a valid LOA.

Section 3.2.5 Understanding PAST DUE Status

PAST DUE status is used to indicate that a request has not been completed by the date listed in the “Current Due Date” field of the RF. Additional work is required before the RF can be placed in “COMPLETE” status. However, due to the nature of these problems, it may be a day or two after the Current Due Date before a reason can be determined. The fact that the RF is in “PAST DUE” status is an indication that the completion of this RF has been escalated internally, and every effort is being made to complete the RF as soon as possible.

Contact BBCCD via email at m31780@att.com if:
• The RF is not updated within a reasonable time interval (suggested one day overdue). Within one business day, the CSA will update the RF with a new status or the NSP Remarks field with an estimated provisioning date, and the Current Due Date field will be updated with the new estimated Service Order completion date. Escalation procedures may be initiated if this update does not occur.

• The web interface is not updated with information as indicated and/or the explanation from CSA is insufficient, then escalation procedures may be initiated. (Please provide name of CSA and DSL telephone number and/or RF ID).

Section 3.2.6 Understanding “PENDING FACILITY” Status
When an RF is placed in a “PENDING FACILITY” (PF) status, the CSA will work with other AT&T departments to secure an Estimated Service Date (ESD).

An ESD will be posted within 3 business days of the initial due date. Once the ESD is obtained, the CSA will update the AT&T Current Due Date on the RF with the new date and make an entry in the NSP Remarks field. Often, this process is handled by automatic flow of the revised current due date from internal systems that track the status of engineering and construction jobs. When this happens, the AT&T Current Due Date field will be updated, but there will be no entry made in the NSP Remarks field.

If facilities cannot be assigned or if the loop is too long, then the RF will be cancelled at the request of Engineers. The CSA will notify, via the Request Form, that Cancellation by the NSP is required. However should the NSP fail to cancel the RF, there is an automated script that runs every 24 hours that will cancel these types of RFs... Notification will be made through a SOEG status of “Held” with a Held Reason of “CANCEL”. Remarks will be placed in the NSP Remarks indicating the reason for cancel, as “the order cannot be provisioned with DSL”. This Held status affords the NSP the opportunity to be notified prior to the completion date. Also, this will notify the NSP to send a Cancel RF to BBCC for the DSL service ordered.

If a Cancel Request is not received from the NSP by Day 2, the order will be cancelled automatically by BBCCD. BBCCD will be using a cutoff time of 3:00 pm Monday through Friday to determine what is cancelled on Day 2. For example, if a request were modified to reflect a status of Held and a Held reason of Cancel before 3:00 pm today, then Day 2 would be tomorrow. If a request were modified after 3:00 pm today, then Day 2 would be tomorrow +1 day (or today + 2 days).

An RF may also be placed in PF status if there are Element Problems that occur prior to the completion of the Service Order. For example, there may be a problem with the DSL DSLAM that is preventing further provisioning steps. Element problems may exist for various reasons and may take extended periods of time to correct. Some of the more common reasons are:

• DSLAM not turned up yet and facilities (ports) have been assigned prior to construction completion dates
• One or more users have been assigned to the same facilities in the DSLAM
• ATM cross connects have not been established

Contact BBCCD via email at m31780@att.com
- Further explanation is required.
- The AT&T Current Due Date field is not updated with an Estimated Service Date or Estimated Completion date and the due date is more than 3 days past due.
- The AT&T Current Due Date field and the NSP Remarks are displaying different dates. If this is the case, then the Current DD field is likely the correct information, because remarks will not be updated when handled by Automation.
- Escalation is only suggested if an RF has been in “Pending Facilities” status for more than 3 business days and the Current Due Date field has not been updated to reflect the estimated service date to the end-user customer.

### Section 3.2.7 Handling Erroneous Disconnects of DSL Service

Erroneous disconnects are considered high priority and every effort is made to restore DSL service in an expeditious time frame. Erroneous disconnects of DSL service will be handled internally between BBCCD and other AT&T departments. Erroneous disconnects will be corrected without input required in SOEG by the NSP. The CSA will provide a new or existing RF number to be used by the NSP for tracking the status of the error correction.

Some causes of erroneous disconnects include:
- Disconnecting of local telephone service in error.
- Unauthorized switching to another local exchange carrier.
- CSA or other AT&T organization disconnected DSL in error.

**NOTE:** If the disconnect resulted from an RF submitted by the existing NSP, this is not considered an erroneous disconnect, and a NEW Request is required from the NSP for the DSL service to be reestablished.

Other AT&T departments will contact BBCCD to have DSL added back on after the End User’s new account is established in AT&T databases.

The CSA will also correct any billing issues with the NSP billing account due to an erroneous disconnect.

**Contact BBCCD via email at** m31780@att.com:
- Whenever a customer has been disconnected for no apparent reason.

**Contact BBCCD for for Disconnects in Error via email at** m31780@att.com:
- Escalation procedures may be initiated when service is not working by the end of the next business day after the erroneous disconnect occurred. BBCC has established special procedures within BBCCD to handle Disconnect In Error (DIE) escalations. Should it be necessary to escalate on a DIE, please call 888 701-2375, option 8. This number will be staffed during the hours of 8:00 am to 7 pm Monday through Friday and 8 am to 4:30 pm on Saturdays.
Section 3.2.8 Service Order Entry Gateway – “Held for Cancel” Status
In the course of providing DSL service requested by our NSPs, AT&T network technicians will occasionally be prevented from completing their work by an end-user who claims he/she did not order DSL service. In these rare instances, rather than cancel the RF outright, AT&T will place the RF in a “held for cancel” status in SOEG for seven calendar days. This will allow the NSP time to contact the end-user to resolve any misunderstandings. The NSP would then either issue an “Update to Pending Order” to request AT&T proceed with the completion of the work, or initiate a “Cancel” request to cancel the RF.

If the NSP does not choose to act on the “held for cancel” RF within seven calendar days, the RF will be canceled. The NSP can capture any “held for cancel” RFs using the SOEG “Service request status report” option.

Section 3.2.9 False Positive Procedure
This section describes the process for communicating DSL pre-qualification “False Positive” situations. A “False Positive” is defined as an end user that is pre-qualified through LQS but, during the installation process, is later discovered not to be qualified. The determination of being not qualified can be made as a result of AT&T only being able to offer service that is diminished in some way, for example the speed is slower or the signal is intermittent. Or, it can also be the result of not being able to offer DSL service in any capacity. This determination is made by AT&T’s engineering group.

When the engineering group makes the determination that the service is not going to be possible or that the existing service cannot be improved, then BBCCD will send an email to notify the NSP.

In those cases in which the customer has diminished service, once the email is issued, the NSP has a three-day window to call the end user and advise them of the situation. If the end user wants to keep the diminished service, then the NSP will need to call the telephone number provided in the email. If there is no response from the NSP within the three days the customer will be disconnected.

In those cases in which no service will be possible, the NSP will receive notification through email, and the customer will be disconnected within three days as well.

Section 3.2.10 SOEG “End of Service Notification” RFs
A Service Order Entry Gateway (SOEG) Request Form (RF) with a type of “End of Service Notification (EOSN)” provides Network Service Providers (NSPs) a way to be notified of when one of their users’ DSL service is de-provisioned as a result of end-user activity. In this case, the de-provisioning of the service was not initiated by an NSP SOEG request. The EOSN provides NSPs with a method to reconcile their billing records and to reclaim vacated assignments.

An End of Service Notification request will be automatically generated in SOEG for record purposes when an end-user is moved from one NSP to another. This End of Service Notification request will trigger a Disconnect Billing Order for the previous NSP. “AT&T Disconnect” will
appear in the remarks field on the disconnect order. An “End of Service Notification” choice is available on the request type menu in SOEG for NSPs searching for these RFs.

Additionally, a POTS disconnect or move will generate an automatic EOSN in SOEG. Each EOSN will include the “end-user order number”. This 8-character order number will begin with a D, F, or C. This is the end-user Plain Old Telephone Service (POTS) order that triggered the de-provisioning of the DSL. The EOSN will provide the end-user telephone number and the date AT&T stopped billing the NSP for that circuit.

However, not all the scenarios that would result in de-provisioning DSL service for an NSP are currently automated in SOEG. Manual EOSN RFs that are issued by the BBCCD to capture de-provisioned DSL service are triggered by:

1. False positives
2. Tariff Infractions
3. Transfer of Contract

The following explanations will allow you to differentiate between the situations that would trigger an EOSN RF:

(i) **EOSN with associated C order (AT&T Disconnect):**
   End-user has switched DSL service to another NSP. **The (EOSN) on the RF will show “Change NSP.”**

(ii) **EOSN with associated D order:**
    End-user has disconnected phone service with AT&T, which has resulted in the de-provisioning of the DSL service. **The EOSN reason on the RF will show “POTS disconnect.”**

(iii) **EOSN with associated F order:**
    End-user has moved. This triggered the de-provisioning of DSL service at the old address. Note: It is possible that the end-user has kept the same telephone number and re-activated DSL service at the new address with the same NSP. **The EOSN reason on the RF may show “POTS disconnect” or “POTS move.”**

(iv) **EOSN with associated C order (False Positives):**
    This will be generated when an RF completes in SOEG, and it is subsequently determined that the loop is unable to support DSL service. Remarks field on the RF will show “False Positive” with an explanation of disqualification.

(v) **EOSN with associated C order (Tariff Infraction):**
    Continued provision of DSL service would violate tariff terms and conditions. Remarks field on the RF will show “Tariff Infraction”.

(vi) **EOSN (Transfer of Contract)**
    This will indicate that one NSP has purchased another NSP and all their end users have been transferred to the acquiring NSP.
Section 3.2.11 Notification of TN Changes

Notification of TN Changes - A “Change Notification” will be generated when your existing DSL end-user changes their phone number. “Change TN Notification” will be added to the Request Reason search option. Both the new and old telephone numbers will be displayed on the “Change Notification” SRF, preceded by NTN and OTN respectively.

Section 3.2.12 Memo Notifications
Occasionally there is a need for AT&T to add important notes to a completed or archived SOEG record for one of your existing DSL customers. Prior to the Memo Notification capability being implemented, these notes were added to the Remarks field on the original completed SRF. The problem was there was no systematic way for an NSP to find these remarks or to know when they were added. Memo Notification is a SOEG “Request Type” that is generated by BBCC. Memo Notifications are categorized into the following searchable “Request Reasons”:

- **Billing Information** – This documents any billing adjustments that BBCC made to this number.
- **Disconnect In Error** – This memo type will be used to indicate that the customer’s service was disconnected in error and confirms that service was re-activated by BBCC on an escalation by the NSP.
- **Lost DSL Assignments** – To an NSP, this memo type is the same as “Disconnect In Error”. The differentiation is for AT&T auditing purposes.
- **Memo Notification Other** – This is a “catch-all” for all other notes.

The Memo Notification SRF will contain the following “view only” fields:
- Request Number
- Request Submission Date
- NSP Name
- End User Telephone Number/Account Number
- End User Circuit ID (for PCDATA customers)
- Memo Notification Type
- Remarks
- Submitted By – the login ID of the user adding the notes.

Section 3.3 BBCCD Escalation Procedures (Service Requests/Orders)
NOTE: Effective April 3, 2017, BBCCD office hours are being changed to the following:

- **From:**
  - Sunday CLOSED
  - Monday – Friday 8:00am – 7:00pm (ET)
  - Saturday 8:00am – 4:30pm (ET)

- **To:**
  - Sunday CLOSED
  - Monday – Saturday 8:00am – 10:00pm (ET)
**Service Request/Order Escalations** will be accepted for Service Requests only *after* the NSP has checked the SOEG website and found the request form (RF) is in a status other than “COMPLETE”.

**To Move a Due Date on an Order:**
1. Check the RF status in SOEG at [https://dslorder.wholesale.att.com](https://dslorder.wholesale.att.com). IF the status is other than “COMPLETE”, proceed to step 2. IF “COMPLETE”, troubleshoot with DSL Tier 2.
2. Contact BBCCD via email at m31780@att.com.
3. If satisfactory resolution is not made in a timely manner, Supervisor assistance may be requested.

Escalation response will provide a progress status report to the caller within 4 hours. Thereafter, if a satisfactory resolution is not made in a timely manner, contact one of the following BBCCD Managers for further assistance. A manager should call within the hour:

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>EMAIL Address</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asst. Mgr.</td>
<td>Paulette Robbins</td>
<td><a href="mailto:paulette.robbins@att.com">paulette.robbins@att.com</a></td>
<td>(925) 904-2022</td>
</tr>
<tr>
<td></td>
<td><em>(See 1 star note at bottom)</em></td>
<td></td>
<td>Office</td>
</tr>
<tr>
<td>Asst. Mgr.</td>
<td>Pam Wright</td>
<td><a href="mailto:pamela.colquitt@att.com">pamela.colquitt@att.com</a></td>
<td>(925) 904-2042</td>
</tr>
<tr>
<td></td>
<td><em>(See 1 star note at bottom)</em></td>
<td></td>
<td>Office</td>
</tr>
<tr>
<td></td>
<td>Any process breakdown</td>
<td><a href="mailto:m16614@att.com">m16614@att.com</a></td>
<td>(925) 904-2017</td>
</tr>
<tr>
<td></td>
<td><em>(WHLSLE_DSL_CUS_RELATIONS)</em></td>
<td></td>
<td>Office</td>
</tr>
<tr>
<td>Ctr. Mgr.</td>
<td>Pam Belmore</td>
<td><a href="mailto:pam.belmore@att.com">pam.belmore@att.com</a></td>
<td>(925) 904-2017</td>
</tr>
<tr>
<td></td>
<td><em>(See 1 star note at bottom)</em></td>
<td></td>
<td>Office</td>
</tr>
<tr>
<td>Director</td>
<td>Laniki Smith</td>
<td><a href="mailto:laniki.jones@att.com">laniki.jones@att.com</a></td>
<td>(404) 927-6400</td>
</tr>
<tr>
<td></td>
<td><em>(See 1 star note at bottom)</em></td>
<td></td>
<td>Office</td>
</tr>
</tbody>
</table>

**Star Note Procedures**

* Include the following information in all *voicemails*:
  * DSL phone number.
  * Description of your escalation request...what is wanted and when it is needed.
  * Your name.
  * A callback name, phone number and extension.

**NOTE:** BBCCD office hours are from *8:00am – 10:00pm ET, Monday – Saturday*. Any calls to supervisor after normal office hours will be answered on the next business day. All Assistant Managers can assist on any of the above noted areas; these are just suggestions for first points of contact.

* MAs = Missed Appointments
PFs = Pending Facilities

**Section 3.4 Company Holidays**

The following days are observed as Company Holidays:
- New Year’s Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Christmas Day
Section 4. DSL Tier 2

Section 4.1 Guidelines for DSL Tier 2 Network Service Provider (NSP) Support

This guide is intended to cover the interaction and expectations for typical problems that are reported to our DSL Tier 2 help desk. This group is reached by calling 888-701-2375, Option #3.

NOTE: Effective November 8, 2015, DSL Tier 2 office hours are being changed to the following:
From:
   Open: Sunday & Holiday 8:00am - 7:59pm (EST)
   Monday-Saturday 8:00am – 10:59pm (EST)
To:
   Open: Sunday & Holidays: 8:00am – 6:59pm (ET)
   Monday – Saturday: 8:00am – 8:59pm (EST)
NOTE: The day after Thanksgiving is a holiday and will follow Sunday hours

Section 4.1.1 General Philosophy

DSL Tier 2 is a second tier help desk for problems involving the physical layer and the ATM layer of DSL service to an end-user customer. The physical layer is the responsibility of AT&T up to the point of the Network Interface Device (NID) at the end-user’s location. DSL Tier 2 supports the NSP’s help desk that is responsible for working with the end-user customer.

DSL Tier 2 has access to certain tools that facilitate limited problem diagnostics from DSL Tier 2 central location. While some diagnostic work can be accomplished with no field support, the diagnostics are typically much more effective when there is someone at the end-user’s location to assist. In addition, the more knowledgeable the local contact, the more effective the diagnostic session, and the more timely service is restored to the end-user.

Section 4.1.2 Pre-requisites and Contact Tips

- Check for additions to CPE network (end-user inside wiring), or faulty CPE network. DSL Tier 2 depends on the NSP’s internal troubleshooting procedures for this.

- If the NSP’s internal troubleshooting procedures have been conducted and indicate that the problem may be a network, rather than CPE, problem, then the NSP should use the Troubleshooting Flows in EBTA GUI to assist them in pinpointing the end-user’s problem. Please see Section 4.1.6 for a description EBTA GUI. EBTA GUI may suggest that the NSP call DSL Tier 2 for assistance.

- Please have the correct DSL phone number ready.

- Please tell the DSL Tier 2 technician the exact nature of the trouble, including all symptoms.

- DSL Tier 2 needs the end-user or Installer on the call to help with troubleshooting. Otherwise, DSL Tier 2’s troubleshooting is severely limited.
(i) **PCData Checklist**

PCData is a Fiber-Optics based DSL Service that is accessed at the end-user premises via a copper two pair Ethernet facility not associated with the incoming voice services. NSP access to PCData end-users is provided via a dedicated ATM backbone facility utilizing a tunneling protocol. The embedded network technology, which is no longer being deployed, currently supports approximately 150,000 telephone subscribers in Florida and Atlanta, Georgia.

These subscribers are identified via the loop qualification system, OneQual (formerly known as LQS). The loop qualification system designates a telephone subscriber as a PCData supported end-user by responding to an inquiry with “A,F”, which indicates “Available on Fiber”.

For further information regarding PCData, or to arrange Backbone facilities to support these end-users, please contact your AT&T Marketing Account team.

The following list contains special instructions for submitting a PCData trouble ticket:

- **PPP**
  - The following list details PCData requirements/questions to answer for submitting a trouble report for PPP issues:
    1. Did the customer’s service operate before the problem began?
    2. What are the customer’s symptoms?
    3. Can the customer authenticate?
    4. Has the PC been rebooted?
    5. Has an installer attempted sync at the NID with the premises wiring isolated?
    6. Determine the appropriate drivers?
    7. Ensure correct password and try a test password.
    8. Verify the NTS settings.
    9. Has the customer surfed with a static IP?
    10. Can PCData ping the OMU-18?
    11. Can PCData see the OIU-45?
    12. Is the customer port up?

- **Bridged**
  - The following list details PCData requirements for submitting a trouble ticket for Bridged issues:
    1. Did the customer’s service operate before the problem began?
    2. What are the customer’s symptoms?
    3. Has the customer surfed with a static IP?
    4. Has the PC been rebooted?
    5. Check SOEG for a COMPLETE status.
    6. Is there a confirmed outage?
    7. Has an installer attempted sync at the NID with the premises wiring isolated?
    8. Is the NIC configured and has a ping test been completed?
    9. Has any new CPE been added or changed?

- **PCData**
  - The following list details PCData requirements for submitting a trouble report:
    1. Did the customer’s service operate before the problem began?
2. What are the customer’s symptoms?
3. Obtain the customer’s name and TN.
4. Was the computer completely powered down (Cold Boot)?
5. Detail the customer complaint and error code.
6. What troubleshooting has already been done?

Section 4.1.3 Test and Troubleshooting Information

- Trouble Ticket Numbers will be issued on all trouble reports.
- When a dispatch must be made to another AT&T work group, the DSL Tier 2 technician will provide the NSP with the dispatch reason and commitment date and time. This is not an appointment; it is a commitment to complete the work by the indicated date and time.
- When closing a trouble ticket, the DSL Tier 2 technician will provide the NSP with the description of the problem resolution. In many cases, the technician will be reporting back to the customer based upon trouble ticket notes supplied by other work groups, however, it is the responsibility of the DSL Tier 2 technician to obtain and pass on adequate information to close out the trouble ticket.
- The DSL Tier 2 technician will report back to the NSP the status of the physical circuit. The two states for a circuit are: that it is up and performing satisfactorily, or it is not.
- There are a number of tests and sources of information that the DSL Tier 2 technician uses in troubleshooting a circuit. This information and the results of these tests are often not relevant outside of the total context of the troubleshooting effort. For this reason, specific technical information will NOT be released to the NSP.
- However, the following test information WILL be provided to the NSP upon successful completion of testing (further explanation of this information can be found in Section 5, DSL Synchronization Status):
  - Synchronization Parameters from the DSLAM port.
  - Synch Rate
  - Relative Bandwidth (as appropriate for the platform)
  - Noise Margin
  - IMPORTANT!! Before you make any decisions about what the above information signifies, please read the additional information in Section 5, DSL Synchronization Status for a better understanding of the data.

Section 4.1.4 Process for Troubleshooting DSL Problems

The basis of good troubleshooting is to follow a predefined process and step through a checklist of those factors that must be understood in order to eliminate possible sources of error. In many cases, this may seem redundant but it is necessary to eliminate the obvious. The necessary steps are outlined below.

The NSP should take the following steps before calling DSL Tier 2:
• Check the Service Request Database (SOEG) to insure that the request for this service is in “COMPLETE” status. If it is not, the installation should be rescheduled. If there are issues with the order, BBCCD should be contacted.

• Check for changes in the customer’s telephone environment:
  • Have new phones, fax machines, or other phone line equipment been added?
  • Have other devices, such as halogen lighting or 900 MHz equipment that can interfere with the DSL signal been added?
  • If a splitter is not used, are filters in place on all devices attached to the phone line, except the DSL modem?
  • Is it certain there is no filter on the DSL modem?
  • Is there continuity from the NID to the DSL modem?
  • Has the user tried to power cycle the modem and the computer to see if sync can be achieved?
    • For PCData, check for changes in the customer’s telephone environment:
      • Have new phones, fax machines, routers or other phone line equipment been added that might affect inside wiring?
      • Is it certain there is no filter on the PCData drop?
      • Is there adequate signal at the NID?
      • Has the end-user tried to power cycle the PC and reseated the RJ-45 connection to see if Ethernet signal can be achieved?

When calling DSL Tier 2 when there is no one at the end-user premises, the DSL Tier 2 technician will:

• Check customer records to make sure the service has not been disconnected for any reason. Sometimes DSL service is removed when a customer makes a change to his/her service that is incompatible with the DSL service. The DSL Tier 2 technician will advise of such a condition.

• When a modem cannot achieve synchronization (no sync):

• Look on the DSLAM port for synchronization. Lack of sync is not indicative of a problem, since it is not known if the modem is turned on or plugged in. However, if the DSL Tier 2 technician can see sync, then it can be assumed that the modem is in sync, and the DSL Tier 2 technician must defer further troubleshooting until someone can be present at the premises.

• Check the DSL Network Management System (NMS) for any condition that may be blocking the service. Initiate problem resolution procedures when this is found.

• If the end user’s circuit originated from a CO, the DSL Tier 2 technician will temporarily introduce an administrate profile, a “sync test profile”, which will bring the speed to a much lower level than normal. If the end user can achieve synchronization at this slower speed, it is an indication that the Network is not causing the
end user’s problem. The NSP should look to the end user’s CPE or inside wiring for a possible source of their inability to gain sync. The sync test profile will be removed at the end of testing to bring the user’s line back up to their normal speed.

- If there has been recent service order activity and the circuit originates from a Central Office (CO) based DSLAM, have the CO technician run a sync test at the wiring frame. Initiate problem resolution procedures if this test fails.
  - When the modem is in sync, but cannot pass IP traffic (described as sync, no surf):
  - Verify with the NSP that the correct PVC (VPI/VCI at each end of the logical circuit) has been provisioned.
  - Verify sync on the customer’s assigned port on the DSLAM. If there is sync, look at the footprint to determine if there is an indication of physical level problems in the DSL loop. If so, take corrective action.
  - Initiate an OAM (Operation, Administration, and Maintenance) ping test. This test will inject control packets into the ATM network and logically loop them back at the DSLAM in order to test two-way traffic capability throughout the network. In some cases, the end-user modem will support this ATM functionality, but in many cases it will not. A test may be attempted on the modem and, if it is successful, it demonstrates ATM communications to the modem. If it is not successful, then no conclusion can be reached, because modems do not reliably support this function. If this test shows a problem in the network, initiate corrective action.
- Calling DSL Tier 2 when an end-user customer is at the premises. All of the tests that were performed in the above section will be performed. In addition, the following activities will be initiated:
  - When a modem cannot achieve synchronization (no sync):
  - Have the end-user ensure that the modem and the PC are turned on. The DSL Tier 2 technician may ask that the modem be turned off while he/she administratively locks and unlocks the port on the DSLAM. If no resolution is achieved, the end-user or the NSP installer will have to proceed to “Isolate and test at the NID step”.
  - When the modem is in sync, but cannot pass IP traffic (sync, no surf):
  - The DSL Tier 2 technician will examine packet traffic through the ATM network while the end-user attempts to communicate. The results of packet traffic examination will be reported to the NSP.

Section 4.1.5 Isolate and Test at the NID for No Sync Problems.
In order to determine if problems exist in the network or with the end-user customer’s inside wiring or equipment, it is necessary to separate the network from these other elements. This is done at the Network Interface Device (NID). If the NSP and the customer are not comfortable in performing these steps, the NSP should dispatch one of their technicians to the site to continue the troubleshooting with the DSL Tier 2 technician, or the NSP should request a sync at the NID test from BBCCA, which requires a truck roll.

When a modem cannot achieve synchronization (no sync):
• The end-user or the NSP technician should connect the DSL modem directly to the NID. If the modem shows sync, then the NSP should troubleshoot the inside wiring.

• The DSL Tier 2 technician will temporarily place the service on the maintenance ("sync test") profile. This is a test that should get the modem into sync, but at a low (and unacceptable) bit rate speed. If the modem does achieve sync, then this shows that the DSL service is provisioned properly, but there is a physical impairment to the signal. In most cases, the cause of this problem is either in the inside wiring (customer side of the NID) or a device on the telephone line that is not filtered. The NSP can troubleshoot with the customer to eliminate the problem or, they can request DSL Tier 2 dispatch a technician for a sync at NID test to eliminate the AT&T network as a cause of the problem.

AT&T has established DSL Synchronization @ Network Interface Device Verification Service (DSL Sync @ NID Verification Service) as an enhancement to customer service. This service was developed based on feedback from you and is also often referred to as “Maintenance Truck Rolls”.

Here is how DSL Sync @ NID Verification Service enhances the existing service process:

• Perform your standard troubleshooting procedures for the following conditions: No-sync, Sync-no-surf, and Intermittent Sync on new installations and maintenance calls.

• If you are unable to isolate and repair the trouble, call DSL Tier 2. DSL Tier 2 will work with your help desk to perform testing and troubleshooting to isolate and identify possible AT&T network problems. The most effective troubleshooting is performed with assistance at the customer NID. However, DSL Tier 2 will perform remote testing even if no one is on-site at the customer location. In the event an AT&T network problem is clearly identified, we will follow our present policy of dispatching an AT&T technician to fix the probable network trouble. This AT&T originated dispatch will continue to be made at no cost to you.

• If an AT&T network problem is not clearly identified during testing, YOU, the NSP, may request an DSL Sync @ NID Verification Service Truck Roll by formally requesting one from the DSL Tier 2 technician or by following the “No Sync” flow in the EBTA GUI. See Section 4.1.6 EBTA GUI below for more information on EBTA GUI. We will then dispatch an AT&T field technician to your end-user premises.

• If our field technician finds a trouble in the AT&T network, we will fix the problem at no charge to you.

• However, if the field technician verifies sync at the NID, then AT&T will bill you a non-recurring charge in accordance with FCC Tariff #1, Section 13.3.1. This charge is $80.00 for the first half-hour and $55.00 for each additional half-hour of technician dispatch time during normal business hours. Refer to the tariff for overtime and premium time charges.

Section 4.1.6 EBTA GUI

The EBTA System has been developed to provide a NSP the ability to troubleshoot their end user’s issue as well as the option of electronically entering a ticket for DSL Tier 2 to further test and/or repair an end-user’s DSL service if necessary; this is in lieu of calling in a repair ticket to 888-701-2375, option 3. Additionally, EBTA GUI provides the NSP with real-time status.
information regarding all tickets they have in the system (regardless of whether they were originally entered electronically or called into the regular BBCC assistance line).

EBTA GUI is a web-based system which may be accessed via the URL, https://osstoolbar.att.com/toolbar/index.html. Through the EBTA GUI, the NSP may run test flows for the following troubles: No Sync; Intermittent Sync; Sync No Surf; Intermittent Surf; Slow Speed, and Port Reset. If at the end of the troubleshooting flow, the results indicate that a ticket to DSL Tier 2 is warranted, EBTA will submit a ticket for a DSL Tier 2 technician to perform testing. PLEASE NOTE: (If the NSP has an issue beyond the scope of the above mentioned trouble types, a call must be placed to the regular DSL Tier 2 assistance line).

In response to each of these ticket types, the DSL Tier 2 technician will perform a series of tests, take the appropriate remedial action, and report the results back to the NSP through EBTA GUI. Via EBTA GUI, the NSP may also conduct searches on their tickets, as well as receive status and resolution information. EBTA GUI provides status information to the NSP on all tickets whether they were submitted via EBTA GUI or if they were called into DSL Tier 2 via the regular repair request line.

EBTA GUI provides NSPs with two methods of reporting troubles and accessing status and resolution information regarding their tickets; the NSP can either access the trouble ticket services directly through the GUI via the Web site referenced above, or by writing an interface to EBTA GUI, they may utilize their own internal information systems.

For those NSPs who want to write an interface to EBTA, there is a, JIA (Joint Application Agreement design document that provides NSPs with the technical information they need to build and implement their own interface to EBTA. The NSP can request this document by sending a request to the account team contact.

There are two user types applicable to an NSP: the Administrator (who has administrative privileges to add sub groups for their NSP, in addition to the privileges of the User), the User (who has privileges to enter and read tickets).

EBTA GUI provides several summary reports on tickets opened to the DSG, and circuit history. These reporting functions are available only through the EBTA GUI; they are not supported by the API.

An NSP user accessing EBTA GUI will only be able to view or enter data for their specific NSP. They will not be able to view or modify a trouble ticket that has been established by any other NSP. They may also only run tests on their own circuits and reports on their own circuits and/or users.

When an NSP registers to use the EBTA GUI system, they will be given a User ID and password combination that will allow them to logon as an “Administrator”.

Requests to register to use EBTA GUI and obtain the Administrator login for your NSP should be handled via the account manager.
Once the Administrator has been entered into the system, an e-mail confirmation will be sent to the specified e-mail address. In this confirmation e-mail will be a randomly assigned password generated by EBTA GUI, which must be used to log into the system. This password is case sensitive so it must be entered into the system exactly as it appears in the e-mail (paying attention to the case of the various letters in the password). The system will require the Administrator to change this password to one of their choice, immediately upon successfully logging into EBTA GUI.

EBTA GUI provides two methods of reporting ticket status information back to the NSP; the NSP can access the ticket on-line and conduct searches of their tickets to get current status and, optionally, the NSP user may request that e-mail reports regarding their tickets be sent to them. The option to e-mail tickets must be specifically requested by the user on a per ticket basis. Extreme care should be exercised in setting up e-mail notifications by the user or they may find themselves inundated with e-mails.

Section 4.2 DSL Tier 2 Escalation Procedures

Escalations:
In order to better serve our customers, the DSL Tier 2, has restructured our escalation procedures. All escalations to DSL Tier 2 should be directed to our main number, 888-701-2375, option 3. A Multi-Media Technician will handle the escalated issue, including engaging a Supervisor as necessary.

Note: The Hours of Operations is a modification to the previous communications sent on 10/22/15.

Please follow the steps in order

<table>
<thead>
<tr>
<th>Name</th>
<th>Availability</th>
<th>Contact Number(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1.</strong> Call DSL Tier 2 at (888) 701-2375 option 3</td>
<td>•Sunday &amp; Holidays : 8:00am – 6:59pm (ET) •Monday – Saturday : 8:00am – 8:59pm (ET)</td>
<td>(888) 701-2375 option 3</td>
</tr>
<tr>
<td><strong>1.</strong> Inform the DSL Tier 2 technician that you are reporting:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o A Reoccurring Trouble Escalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o A Dispatch Escalation for a customer who is requesting that their DSL Tier 2 generated dispatch is expedited to an earlier time/date.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. Note:</strong> If an expedited dispatch is not granted and the End-User insists on an escalation, <strong>DO NOT HANG UP</strong>......Tell the DSL Tier 2 technician that you need to escalate the issue and <strong>ask to speak to an DSL Tier 2 supervisor</strong>.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Availability</th>
<th>Contact Number(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 2.</strong> Call DSL Tier 2 at (888) 701-2375 option 3</td>
<td>•Sunday &amp; Holidays : 8:00am – 6:59pm (ET) •Monday – Saturday : 8:00am – 8:59pm (ET)</td>
<td>Ask to speak to a DSL Tier 2 Supervisor. If issue is related to a dispatch, explain that, although the Dispatch Escalation Process failed to produce an earlier dispatch, the End-User insists on escalating this dispatch. Provide your name as the Escalating Agent and contact information. Request that the DSL Tier 2 Supervisor continue escalating the dispatch.</td>
</tr>
<tr>
<td><strong>If no follow up within 60 minutes, proceed immediately to Step 3.</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Availability</th>
<th>Contact Number(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 3.</strong> Email the DSL Tier 2 Executive Escalations mailbox</td>
<td>•Sunday &amp; Holidays : 8:00am – 6:59pm (ET)</td>
<td>Email the executive escalations mailbox – (<a href="mailto:m24537@att.com">m24537@att.com</a>)</td>
</tr>
<tr>
<td><strong>Please ensure subject line of the email is in the following Format:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 4. Email the DSL Tier 2 Executive Escalations Manager</td>
<td>Example: NSP Escalation: 123-456-7890 or NSP Escalation: AB123456</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Monday – Saturday: 8:00am – 8:59pm (ET)</td>
<td>If no response within 30 minutes, proceed immediately to Step 4</td>
<td></td>
</tr>
<tr>
<td>Sunday &amp; Holidays: 8:00am – 6:59pm (ET)</td>
<td>Torian Humble (<a href="mailto:th1837@att.com">th1837@att.com</a>)</td>
<td></td>
</tr>
<tr>
<td>Monday – Saturday: 8:00am – 8:59pm (ET)</td>
<td>If no response within 15 minutes, proceed immediately to Step 5</td>
<td></td>
</tr>
<tr>
<td>Sunday &amp; Holidays: 8:00am – 6:59pm (ET)</td>
<td>Torian Humble (314) 983-5082 Office</td>
<td></td>
</tr>
<tr>
<td>Monday – Saturday: 8:00am – 8:59pm (ET)</td>
<td>(314) 625-8742 Cell</td>
<td></td>
</tr>
<tr>
<td>Sunday &amp; Holidays: 8:00am – 6:59pm (ET)</td>
<td>Torian Humble (314) 983-5090 Office</td>
<td></td>
</tr>
<tr>
<td>Monday – Saturday: 8:00am – 8:59pm (ET)</td>
<td>(314) 983-5055</td>
<td></td>
</tr>
<tr>
<td>Sunday &amp; Holidays: 8:00am – 6:59pm (ET)</td>
<td>Torian Humble (314) 631-6869 Cell</td>
<td></td>
</tr>
<tr>
<td>Monday – Saturday: 8:00am – 8:59pm (ET)</td>
<td>(314) 308-6506</td>
<td></td>
</tr>
</tbody>
</table>

**Star Note Procedures**

*Include the following information in all voicemails:*
- DSL phone number.
- Description of your escalation request…what is wanted and when it is needed.
- Your name.
- A callback name, phone number and extension.

**Section 5. DSL Synchronization Status**

To assist you with your troubleshooting process, **DSL Tier 2** will furnish certain technical information about the DSL signal to you. Specifically, we will communicate the “Synchronization parameters” that are measured at the Digital Subscriber Line Access Multiplexer (DSLAM) port, or at the end-user customer’s Network Interface Device, as appropriate and available. It is necessary to understand something about the DSL technology in order to interpret these numbers. Please refer to the “NSP Handbook” for a complete discussion of the technology.
Section 5.1 Specific Information to Be Provided

We will provide the following information to the Network Service Provider, when the information is available:

- Whether or not the DSLAM port is in sync.
- Downstream (DSLAM to end-user) sync-rate in kilobits per second.
- Downstream signal-to-noise ratio (a.k.a. noise margin or SNR) in Decibels (normal is 6 or more).
- Downstream bandwidth.
- Upstream (end-user to DSLAM) sync-rate in kilobits per second.
- Upstream signal-to-noise ratio (a.k.a. noise margin or SNR) in Decibels (normal is 6 or more).
- Upstream bandwidth.

Note that these values are the values established at training (described below), and not dynamic values. The rate is determined at training, but the SNR margin is dynamic and can and will change after the modem has trained. Also, if the port is not currently in sync, there is a history that shows what the parameters were the last time the port was in sync. We will give you these parameters, but there is no way to tell to what the port was syncing. It may have been to a technician test set on the installation of the service, or it may in fact be a previous end-user that was using this port.

When a dispatch has been made for a sync-at-NID test, the preceding information will be reported from the test set used by the field technician. Otherwise, the information will be given from the port values on the DSLAM, when available.

Section 5.2 What Are Acceptable Parameters?

The recommended minimum parameters for Industrial Class service, as measured at the end user customer NID, are 384 kilobits per second (kb/s) sync-rate downstream, capacity less than or equal to 100%, and noise margin greater than or equal to 6 dB. If the downstream sync-rate exceeds 384 kb/s, a noise margin greater than or equal to 4 dB is acceptable. At these parameters, sufficient margin exists to accommodate inside wiring losses, seasonal temperature variations, and potential future interference from new sources.

Section 5.3 Technology Summary

The DSL signal between the DSLAM and the end-user is a set of individual tones (electromagnetic signals.) In a perfect world, most of these tones can be used to carry data (tone 1 is used for POTS and some tones are required for band separation), however, there are many other signals both inside (e.g. T1s, DAML and ISDN) and outside the cable (e.g. AM transmitters) that are using portions of the same frequency band. They compete with these signal-carrying tones and make their detection problematic. This is called noise (sometimes referred to as disturbers or interferers). The ratio of the strength of the data signal to the strength of the noise signal is called signal-to-noise-ratio (SNR) or noise margin (NM), and is expressed in decibels (dB). The higher this number is, the more bits of data that can be carried within that specific tone.
If all of these paths provide a satisfactory level of expected error rate, then the available bandwidth for carrying the DSL signal is very large (greater than 8 Megabits per second). The DSL equipment, the DSLAM at one end and the end-user modem at the other, will negotiate to use only a certain sub-set of these tones that will provide for the smallest error rate (or largest noise margin) on the connection. This is called training. In particular, the training will use only those tones that during the negotiation process have at least a 6db noise margin. If there are a number of noise sources, or if the data signal is diminished by the length of the circuit, it may not be possible to meet the maximum synchronization rates. When this happens, the equipment will offer to synchronize at a lower sync-rate. This is done by eliminating tones or carrying fewer bits in certain tones (in 32 Kbps) until the remaining tones all meet (or are within 1 or 2 dB of meeting) the 6db target SNR margin.

The percentage of tones used for data communication is expressed as occupancy percentage, or bandwidth. If there is an overall high signal-to-noise ratio across the spectrum, then the equipment will sync up at maximum speed (as determined by the profile built on the DSLAM) and will have a low occupancy percentage and a high noise margin, due to the lower quality tones not being used. However, as the overall signal-to-noise ratio decreases (think of the length of the loop increasing), then more tones will fall below the 6db level and not be used. At some length, there will be a 100% occupancy (all qualified tones in use), a 6db signal-to-noise ratio on the worst quality tone, and full up and down bandwidth. As the length of the circuit is increased beyond this point (or external noise sources become more prevalent); more of the tones will be dropped. This causes the available bandwidth to decrease. The occupancy and signal-to-noise ratio will continue to be around 100% and 6db. At some point, the downstream rate will fall below 256 kilobits per second or the upstream rate will fall below 128 kilobits per second (the 256 kbps downstream requirement is normally the limiting factor). When this happens, the equipment will no longer synchronize.

During the normal operation of the connection, the signal-to-noise ratio will change, and the equipment is constantly monitoring the connection quality. Either end (DSLAM or end-user modem) can request a re-train. With the profile that we use, the DSLAM will force a retrain when the SNR Margin reaches 0db in either the upstream or downstream direction.

In summary, the quality of the information carrying capability of the DSL physical transport will change as conditions change, and they are constantly changing. It is normal, particularly on long loops, to have a speed that is below maximum. Also, when the speed is below maximum, it is normal to have close to a 6db signal-to-noise ratio and close to 100% occupancy (bandwidth).

Section 5.4 How Can I Use This Information?

These port-training parameters by themselves are not terribly meaningful in terms of troubleshooting, with the exception of explaining why an end-user may not be achieving the maximum allowable throughput on their DSL service.

The most useful aspect of these parameters is to compare them when sync is established at the Network Interface Device (NID). This can be found through your own tests, such as having the modem connected directly to the NID with the rest of the inside wiring disconnected, or by asking AT&T to have a technician perform this test for you. If there is considerable difference between the sync-at-NID (with network isolation) measurements, and the measurements when the modem is connected to the inside jack, then it would indicate the presence of noise sources or abnormal
attenuation of the signal in the network between the NID and the jack (i.e. inside wiring). Only by isolating at the NID can the source (network or inside wiring) of the problem be identified. The **DSL Tier 2** technician will assist the NSP by testing cooperatively, as the NSP arranges for the isolation at the NID. Or as an alternative, the NSP can request that **AT&T** dispatch a field technician to the NID to run these tests. There will be a charge for this service if there is no problem found in the network.

### Section 6. Disaster Preparedness and Response:

In keeping with the intent of FCC #1 Tariff sections 2.1.11 and 2.3.9, the Digital Services Group at **AT&T** has prepared extensive Business Continuity plans to implement in the event of a Disaster, either natural or man-made. We will implement those plans and notify you, our customer, via the Broadband Outage Notification System – BONS and by NSP Bulletin publication, in the event of such a disaster. We will endeavor to maintain connectivity and service to the greatest extent possible, as dictated by the type and severity of the disaster.

In the event that you, our customer, suffer a disaster, we will work with you to minimize the telecommunications impacts in a reasonable and expeditious manner, as the situation permits. Please make us aware of your disaster situation by calling **DSL Tier 2** and escalating notification to the duty manager.

### Section 7. Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBCCD</td>
<td>Broadband Customer Care Delivery. The pre-installation help desk within <strong>DSL Tier 2</strong> (formerly the Digital Services Group and Broadband Customer Care). They have responsibility for coordinating various <strong>AT&amp;T</strong> departments to complete service to end-user customer by committed due date.</td>
</tr>
<tr>
<td>EBTA Gui</td>
<td>Electronic Bonding Ticketing Administration replacing the SE repair ticketing system.</td>
</tr>
<tr>
<td>DSL</td>
<td>Digital Subscriber Loop. Technology that allows placement of a high-speed data channel over an existing telephone circuit. It may be asymmetrical with the downstream (toward the end-user) speed being generally higher than the upstream (away from the end-user) speed.</td>
</tr>
<tr>
<td>DSL Phone Number</td>
<td>The end-user telephone number where the DSL service is placed.</td>
</tr>
<tr>
<td>DSL Tier 2</td>
<td>The post-installation help desk within <strong>DSL Tier 2</strong> (formerly <strong>Advanced Technical Support Team – DSL TIER 2</strong> - ) They have responsibility for assisting the NSP help desk in troubleshooting service problems, and in coordinating the repair of <strong>AT&amp;T</strong> network facilities as required.</td>
</tr>
<tr>
<td>ATM</td>
<td>Asynchronous Transfer Mode: a cell switching technology that is used for the layer 2 protocol in the DSL service.</td>
</tr>
<tr>
<td>DSL Bulletin</td>
<td>Periodic process updates of interest to the Network Service Providers about <strong>AT&amp;T</strong>’s DSL services.</td>
</tr>
<tr>
<td>DSLAM</td>
<td>Digital Subscriber Line Access Multiplexer: the central office equipment that is used to provide the end-users DSL service access.</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Letter of Authorization (LOA)</td>
<td>A letter executed by the end-user customer, giving authorization to AT&amp;T to provide DSL service over their telephone line on behalf of a Network Service Provider.</td>
</tr>
<tr>
<td>Network Interface Device</td>
<td>The point of termination of the AT&amp;T network at the end-user’s premises. It is constructed to let the customer access one side, so that the house wiring can be connected to the network.</td>
</tr>
<tr>
<td>Network Service Provider</td>
<td>An organization that obtains basic DSL service from AT&amp;T, adds value (usually Internet services) and resells the service to their customers (the end-user customer).</td>
</tr>
<tr>
<td>NID</td>
<td>See Network Interface Device.</td>
</tr>
<tr>
<td>NMS</td>
<td>Network Management System: the computerized system that manages provisioning the entire DSL network. It must interface with many other systems to provide DSL service.</td>
</tr>
<tr>
<td>NSP</td>
<td>See Network Service Provider</td>
</tr>
<tr>
<td>Order Support Center</td>
<td>See BBCCD</td>
</tr>
<tr>
<td>PVC</td>
<td>Permanent Virtual Circuit: a logical path through the ATM network, it consists of a Virtual Path Identifier (VPI) and a Virtual Channel Identifier (VCI).</td>
</tr>
<tr>
<td>Pending Facilities</td>
<td>A status on a Request Form that indicates there are facilities needed, that are not available, to furnish service to the end-user customer. When a request is in this status, an estimated completion date (put on the Request Form in the “AT&amp;T Current Due Date” field) will be posted within 5 business days.</td>
</tr>
<tr>
<td>Request Form</td>
<td>The formal request to AT&amp;T from a Network Service Provider to provision, change, or disconnect DSL service to and end-user customer.</td>
</tr>
<tr>
<td>Request Form ID</td>
<td>When the Service Order Entry Gateway accepts a Request Form, it will be assigned a unique ID number. This number is used to identify the specific service request.</td>
</tr>
<tr>
<td>Service Order</td>
<td>An internal AT&amp;T document that provides communications between the groups necessary to provide service to a customer. The Service Order is created in response to a Request Form.</td>
</tr>
<tr>
<td>Service Order Due Date</td>
<td>The date that is established for the final provisioning of service at the time the Request Form is accepted by the BBCCD. It is expected that this is the date the end-user customer will receive service. However, unforeseen conditions can cause service to be provided at a later date. See Pending Facilities and Past Due.</td>
</tr>
<tr>
<td>Service Order Entry Gateway (SOEG)</td>
<td>A system that accepts Request Forms (RF) from the Network Service Providers (NSP), and then allows for the NSP to check on the status of pending requests. Access to this system is provided through a web browser interface, or through a machine-to-machine interface (XML/SOAP).</td>
</tr>
<tr>
<td>Telephone Service</td>
<td>Plain old telephone service (POTS). The type used for voice communications.</td>
</tr>
</tbody>
</table>
Truck Roll | The process of sending a technician to a remote location to test and/or repair equipment.
---|---
Past Due | A status on a Request Form that indicates to the Network Service Provider that this particular request has not been completed by due date. There is no estimated completion date, and the request has been escalated for completion or status change.
VCI | Virtual Channel Identifier: a portion of the address in the ATM Virtual Circuit.
VPI | Virtual Path Identifier: a portion of the address in the ATM Virtual Circuit.

**Change Log**

<table>
<thead>
<tr>
<th>Date</th>
<th>Change Description</th>
<th>Section #</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/23/07</td>
<td>Change to BBCCD’s normal business hours to (M-F, 8am-7pm ET and Sat. 8am-4:30pm ET).</td>
<td>3.2.4</td>
</tr>
<tr>
<td>7/24/08</td>
<td>References to DSG have been modified to Broadband Customer Care. References to BCCDG have been modified to Broadband Customer Care Delivery (BBCCD). References to BCCAG have been modified to Broadband Customer Care Assurance (BBCCA).</td>
<td>ALL</td>
</tr>
<tr>
<td>7/24/08</td>
<td>Modifications have been made to clarify Section 3.2.10 <em>SOEG End of Service Notification</em> RFs.</td>
<td>3.2.10</td>
</tr>
<tr>
<td>7/24/08</td>
<td>Updated BBCCD Escalation Procedures (Service Requests/Orders).</td>
<td>3.3</td>
</tr>
<tr>
<td>7/24/08</td>
<td>Change to BBCCA’s normal business hours to (Sun. – Sat., 7am-11:59pm ET).</td>
<td>4.1</td>
</tr>
<tr>
<td>7/24/08</td>
<td>Modifications have been made to clarify Section 4.1.5 <em>Isolate and Test at the NID for No Sync Problems.</em></td>
<td>4.1.5</td>
</tr>
<tr>
<td>7/24/08</td>
<td>Revised Section 4.2 <em>BBCCA Escalation Procedures</em> to indicate new BBCCA office hours.</td>
<td>4.2</td>
</tr>
<tr>
<td>12/11/08</td>
<td>Revised Section 3.3 <em>BBCCD Escalation Procedures</em> (Service Requests/Orders).</td>
<td>3.3</td>
</tr>
<tr>
<td>12/11/08</td>
<td>Revised Section 4.2 <em>BBCCA Escalation Procedures</em>.</td>
<td>4.2</td>
</tr>
<tr>
<td>1/29/10</td>
<td>Change to BBCCA’s normal business hours: Open: Monday through Saturday 8:00am-11:00pm (EST) Closed: Sunday</td>
<td>4.1</td>
</tr>
<tr>
<td>7/25/2011</td>
<td>References to BBCCA and Broadband Customer Care – Assurance have been modified to Advanced Technical Support Team – ATST - Core (ATST – Core).</td>
<td>ALL</td>
</tr>
<tr>
<td>7/25/2011</td>
<td>Revised Section 3.3 <em>BBCCD Escalation Procedures</em> (Service Requests/Orders).</td>
<td>3.3</td>
</tr>
<tr>
<td>7/25/2011</td>
<td>Revised Section 4.2 <em>ATST Escalation Procedures</em>.</td>
<td>4.2</td>
</tr>
<tr>
<td>7/16/2012</td>
<td>Removed entry regarding Service Request Escalation Hotline</td>
<td>3.3</td>
</tr>
<tr>
<td>7/16/2012</td>
<td>Change to ATST-Core normal business hours: Effective August 5, 2012 Open: Sunday through Saturday 12:00am-11:59pm (EST)</td>
<td>4.1</td>
</tr>
</tbody>
</table>
Operating 24 Hours Daily.

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/6/2014</td>
<td>References to Advanced Technical Support Team – Core (DSL TIER 2 – ) Assurance have been modified to DSL Tier 2</td>
<td>ALL</td>
</tr>
<tr>
<td>6/6/2014</td>
<td>Revised Section 3.3 BBCCD Escalation Procedures (Service Requests/Orders).</td>
<td>3.3</td>
</tr>
<tr>
<td>6/6/2014</td>
<td>Revised Section 4.2 DSL Tier 2 Escalation Procedures.</td>
<td>4.2</td>
</tr>
<tr>
<td>9/23/2014</td>
<td>Revised Section 3.2.4 Section 3.4 - Dispute Process for Letters of Authorization</td>
<td>3.2.4</td>
</tr>
<tr>
<td>6/2/2015</td>
<td>Revised Section 3.3 BBCCD Escalation Contacts</td>
<td>3.3</td>
</tr>
<tr>
<td>6/2/2015</td>
<td>Change to DSL Tier 2 normal business hours: Effective June 21, 2015 Open: Sunday 8:00am –7:59pm (EST) and Monday - Saturday 8:00am – 10:59pm (EST)</td>
<td>4.1</td>
</tr>
<tr>
<td>6/2/2015</td>
<td>Revised Section 4.2 ATST Escalation Procedures – updated hours of operation and some contact information</td>
<td>4.2</td>
</tr>
<tr>
<td>10/1/2015</td>
<td>Removed all references to erepair and replaced with EBTA GUI. Updated the process steps associated with EBTA GUI.</td>
<td>4.1.2 and 4.1.6</td>
</tr>
<tr>
<td>10/1/2015</td>
<td>Updated the BBCCD contact table.</td>
<td>3.3</td>
</tr>
<tr>
<td>10/1/2015</td>
<td>Added the EBTA User Guide</td>
<td>4.1.6</td>
</tr>
<tr>
<td>10/21/2015</td>
<td>Updated the DSL Tier 2 Hours of Operation</td>
<td>4.2</td>
</tr>
</tbody>
</table>
| 10/28/2015 | Updated the DSL Tier 2 Hours of Operation- Changed normal business hours: Effective November 8, 2015 Open: Sunday & Holiday 8:00am - 6:59pm (EST) Monday - Saturday 8:00am – 8:59pm (EST)  
**Note:** The effective date and hours of operations are corrections to the previous communications sent in Version 13 on 10/22/15. | 4.2     |
| 04/03/2017 | Updated NSP Guide for Interfacing with DSL Tier to for version 14 to 15                               |         |
| 04/03/2017 | Revised Section 3.1 *The Service Request Process*  
Changed BBCCD’s method of communication  
**NOTE:** Effective April 3, 2017, BBCCD method of communications changed to the following:  
- **From:**  
  o Call – 888-701-2375, Option #1  
- **To:**  
  o Email – m31780@att.com | 3.1     |
<table>
<thead>
<tr>
<th>Date</th>
<th>Section</th>
<th>Revisions</th>
</tr>
</thead>
</table>
| 04/03/2017 | Revised Section 3.2 *Guidelines for Network Service Provider Support Form BBCCD* | Changed BBCCD’s method of communication  
**NOTE:** Effective April 3, 2017, BBCCD method of communications changed to the following:  
- **From:**  
  - Call – 888-701-2375, Option #1  
- **To:**  
  - Email – m31780@att.com |
| 04/03/2017 | Revised Section 3.2.2 *Determining Reason for Rejected Request Forms* | Changed BBCCD’s method of communication  
**NOTE:** Effective April 3, 2017, BBCCD method of communications changed to the following:  
- **From:**  
  - Call – 888-701-2375, Option #1  
- **To:**  
  - Email – m31780@att.com |
| 04/03/2017 | Revised Section 3.2.3 *Submitting Request When DSL Is Already On Line* | Changed BBCCD’s method of communication  
**NOTE:** Effective April 3, 2017, BBCCD method of communications changed to the following:  
- **From:**  
  - Call – 888-701-2375, Option #1  
- **To:**  
  - Email – m31780@att.com |
| 04/03/2017 | Revised Section 3.2.4 *Dispute Process Involving Letters of Authorization* | Changed BBCCD’s normal hours  
**NOTE:** Effective April 3, 2017, BBCCD office hours are being changed to the following:  
- **From:**  
  - Sunday: CLOSED  
  - Monday – Friday: 8:00am – 7:00pm (ET)  
  - Saturday: 8:00am – 4:30pm (ET)  
- **To:**  
  - Sunday: CLOSED  
  - Monday – Saturday: 8:00am – 10:00pm (ET)  
**NOTE:** Effective April 03, 2017, BBCCD method of communications changed to the following:  
- **From:** |
<table>
<thead>
<tr>
<th>Date</th>
<th>Revisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>04/01/2017</td>
<td><strong>Revised Section 3.3 BBCCD Escalation Procedures</strong>&lt;br&gt;Changed BBCCD’s normal hours&lt;br&gt;Note: Effective April 3, 2017, BBCCD office hours are being changed to the following:&lt;br&gt;<strong>From:</strong>&lt;br&gt;  - Sunday: CLOSED&lt;br&gt;  - Monday – Friday: 8:00am – 7:00pm (ET)&lt;br&gt;  - Saturday: 8:00am – 4:30pm (ET)&lt;br&gt;<strong>To:</strong>&lt;br&gt;  - Sunday: CLOSED&lt;br&gt;  - Monday – Saturday: 8:00am – 10:00pm (ET)**</td>
</tr>
<tr>
<td>3.3</td>
<td><strong>Changed BBCCD’s method of communication</strong>&lt;br&gt;Note: Effective April 03, 2017, BBCCD method of communications changed to the following:&lt;br&gt;<strong>From:</strong>&lt;br&gt;  - Call – 888-701-2375, Option #1&lt;br&gt;<strong>To:</strong>&lt;br&gt;  - Email – <a href="mailto:m31780@att.com">m31780@att.com</a></td>
</tr>
</tbody>
</table>