ATIS-0300009

Next Generation Interconnection Interoperability (NGIIF) Reference Document

Part I, Installation and Maintenance Responsibilities

Special Access Services, WATS Access Lines

And Switched Access Services

Feature Group A

**Version 12.0**

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The NIIF Reference Document was formerly known as the Network Operations Forum (NOF) Reference Document. The NOF Reference Document was published and maintained by Bellcore. The last version of the NOF Reference Document is Issue 13.

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# INSTALLATION AND MAINTENANCE RESPONSIBILITIES SPECIAL ACCESS SERVICES, WATS ACCESS LINES AND SWITCHED ACCESS SERVICES FEATURE GROUP A

## Table of Contents

# 1 GENERAL

This document has been developed to provide the operations personnel of the Access Service Providers (ASP) and Access Service Customers (ASC) with general procedures for the installation and maintenance of Special Access Services, and WATS Access Lines and Switched Access Services Feature Group "A". The contents of this document are generic. Specific operational procedures are covered in documentation provided by the ASP(s) and ASC(s). This document does not replace nor supersede tariffs, contracts or any other legally binding documents. In addition to other operational and technical agreements made at the Next Generation Interconnection Interoperability Forum (NGIIF), this document is being reissued to incorporate the following changes:

- Standardization of the Issue Number and publication date to agree with other sections of the NGIIF Reference Document.

The Installation, Testing and Maintenance of facilities that are utilized for the transport of all Special Access and Feature Group A services is covered in the Facilities Document.

# 2 RESPONSIBILITIES

## 2.1 Access Service Customers (ASC)

The ASC has the overall installation and maintenance responsibility for the total service to its end user. It is responsible for the overall coordination of installation and testing of its services.

The following are the responsibilities of the ASCs:

- Provides trained personnel.

- Advise the ASP when there is an ASC network failure that may affect the ASPs services.

- Provides a contact number for trouble reporting that is readily accessible 24 hours a day, 7 days a week.

- Maintains complete and accurate installation and repair records.

- Provides ASP personnel access to the Point of Termination (POT) when required.

- Provides access to testlines where appropriate.

- Provides billing authorization to the ASP for any additional labor requested.

- Ensures the test equipment used is compatible with the ASP's test equipment.

- Cooperates with the ASP ensuring that services are installed in accordance with the ASC service requests.

- Notifies the ASP of any change affecting the service requested, including the service due date.

- Assumes control functions for maintenance of its facilities.

- Consults with the ASP before making any changes that would affect service except under emergency conditions.

- Accepts trouble reports from their end users.

- Accepts trouble reports from the ASPs.

- Sectionalizes and clears the trouble in its own network.

- Keeps their end user advised of the status of all trouble report(s).

- Performs cooperative analysis to determine if a trouble pattern exists.

- Refers troubles to the ASP using the trouble reporting procedures.

- Dispatches its own maintenance forces.

- Performs verification tests to ensure that trouble has been cleared.

- Performs scheduled testing and other maintenance services when requested.

- Participates cooperatively with the ASP to further isolate and clear the trouble when trouble exists and cannot be sectionalized.

- Acts as their end user's contact in all matters involving installation and maintenance of ASC provided services.

## 2.2 Access Service Provider (ASP)

The ASP is responsible for ensuring that the services furnished to an ASC are installed and function properly. In addition, the ASP should work cooperatively with the ASC in the testing of the services it provides.

The following are the responsibilities of the ASPs:

- Provides trained personnel.

- Advises the ASC when there is a potential service affecting ASP network failure.

- Provides a contact number for trouble reporting that is readily accessible 24 hours a day, 7 days a week.

- Maintains complete and accurate installation and repair records.

- Provides access to testlines where appropriate.

- Coordinates with the ASC ensuring that Services are installed in accordance with the service request.

- Notifies the ASC of any changes affecting the service requested, including the service due date.

- Assumes control functions for installation of the Service(s).

- Accepts trouble reports from the ASC.

- Sectionalizes and clears the trouble in its own network.

- Tests cooperatively with the ASC to identify and clear a trouble when the trouble has not been sectionalized to the ASC network.

- Performs cooperative analysis to determine if a trouble pattern exists.

- Refers troubles to the ASC using the trouble reporting procedures.

- Dispatches its own maintenance forces.

- Performs verification test to ensure that trouble has been cleared in their own network.

- Performs scheduled testing and other maintenance services when requested,

- Notifies the ASC of due date jeopardies in a timely manner.

- Establishes local service restoral objectives and may provide them to the ASC upon request.

- Provides status reports to the ASCs regarding installation and repair activity.

# 3 TELECOMMUNICATION SERVICE PRIORITY (TSP) GUIDELINES

This section provides TSP installation and maintenance guidelines for access services and generic administrative procedures and interfaces between ASCs and the ASPs.

The TSP system provides for the priority treatment of National Security Emergency Preparedness (NSEP) telecommunication services in order to prioritize their installation and maintenance.

In order for the TSP system to be effective, it MUST be incorporated into the day-to-day operating procedures for all ASPs and ASCs. All communications carriers are expected to cooperate in the installation and restoration of services with TSP that involve the facilities of more than one carrier.

## 3.1 Domestic NSEP Services

The NSEP TSP system and procedures provide priority treatment to the following domestic telecommunication services (including portions of U.S. international telecommunication services provided by U.S. providers) for which provisioning or restoration priority levels are requested, assigned, and approved:

- Commercially provided private services and public switched services:

  Note: Initially, the NSEP TSP system's applicability to public switched services is limited to provisioning of such services (e.g., business, centrex, cellular, foreign exchange, Wide Area Telephone Service (WATS) and other services that the selected provider is able to provision) and restoration of services that the selected provider is able to restore.

- Services that are provided by Government and/or non common carriers and are interconnected to common carrier services assigned a priority level pursuant to Section 9 of the FCC's TSP system rules.

## 3.2 Control Services and Orderwires

The NSEP TSP system and procedures are not applicable to authorize priority treatment to control services or orderwires owned by a service provider and needed for provisioning, restoration or maintenance of other services owned by that service provider. Such control services and orderwires shall have priority of provisioning and restoration over all other telecommunications servicers (including NS/EP services) and shall be exempt from preemption. However, the NSEP TSP system and procedures are applicable to control services or orderwires leased by a service provider or user from another service provider.

## 3.3 Other Services

The NS/EP TSP system may apply, at the discretion of and upon special arrangements by the entities involved, to authorized priority treatment to the following telecommunications services:

1) Government or non-common carrier services which are not connected to common carrier-provided services assigned a priority level.

2) Portions of U.S. international services which are provided by foreign correspondents.

## *3.4  TSP Code Identification*

The TSP Authorization Code is composed of twelve characters and is divided into two parts.  The first nine characters comprise the TSP Control ID, a computer generated number, which is for the government's tracking purposes.  A hyphen is always the tenth character and it separates the TSP Control ID from the TSP Code.  The final two characters are the TSP Code.   The first character of the TSP Code (the eleventh character of the entire series) indicates the provisioning priority.  Acceptable values are: E (Emergency), 1, 2, 3, 4, 5, or 0.  A value of "0" indicates no provisioning priority is assigned.   The second character of the TSP Code (the twelfth character of the entire series) indicates the restoration priority.  Acceptable values: 1, 2, 3, 4, 5, or 0.   A value of  "0" indicates no restoration priority is assigned.

A TSP Authorization Code is illustrated below:

T S P 1 2 3 4 5 C - 1 2

| |

Control ID      Code
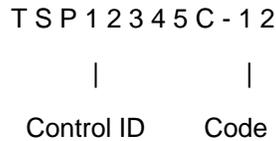
Table 1 below depicts the codes (eleventh and twelfth digits) allowable in the TSP system.

**Table 1: TSP Codes Reference Table**

TSP Provisioning/Restoration Priority Levels

| | P-R | P-R | P-R | P-R | P-R | P-R | P-R | |
|---|---|---|---|---|---|---|---|---|
| | E-1 | 1-1 | 2-1 | 3-1 | 4-1 | 5-1 | 0-1 | |
| | E-2 | 1-2 | 2-2 | 3-2 | 4-2 | 5-2 | 0-2 | |
| HIGHER  ↑ | E-3 | 1-3 | 2-3 | 3-3 | 4-3 | 5-3 | 0-3 | ↓ LOWER |
| ← | E-4 | 1-4 | 2-4 | 3-4 | 4-4 | 5-4 | 0-4 | → |
| | E-5 | 1-5 | 2-5 | 3-5 | 4-5 | 5-5 | 0-5 | |
| | E-0 | 1-0 | 2-0 | 3-0 | 4-0 | 5-0 | 0-0 | |

E = Emergency Priority Level

P = Provisioning Priority Level

R = Restoration Priority Level

A code of "0-0" indicates  "Revocation", the removal of a previously assigned TSP code.

## *3.5  TSP Installation*

Circuits with an E (Emergency) provisioning priority have the highest priority and must be installed As Soon As Possible (ASAP), dispatching outside of normal business hours when necessary.  Circuits with TSP provisioning

priorities 1 - 5 will be installed by the due date according to the TSP provisioning priority assigned (see reference table above).  For example, a circuit with a provisioning priority of "1" would be installed before a circuit with a provisioning priority of "2" when they both carry the same due date.


## 3.6  TSP Maintenance

Available resources should be allocated to restore NSEP services as quickly as practicable, dispatching outside normal business hours to restore services assigned priority levels "1", "2" and "3" when necessary and services assigned priority levels "4" and "5" when the next business day is more than 24 hours away.

The day-to-day administration for repair and restoral of services assigned a TSP restoration priority is shown in the following examples:

Example 1:  If there are several pending Trouble Reports for circuits that do not have TSP restoration codes and a Trouble Report is received for a circuit with a TSP code of 23, the TSP23 circuit Trouble Report moves to the next Trouble Report to be worked ahead of the other circuit Trouble Reports that have no TSP restoration codes.  Upon completion of the repair/restoral of the TSP23 circuit, work continues on the Trouble Reports for the circuits that have no TSP restoration codes.

Example 2:  If there are several Trouble Reports to be worked (which includes a circuit with a TSP23 code) and two additional Trouble Reports are received for circuits with higher TSP restoration codes (such as TSP21 and TSP22), the circuit Trouble Report with the TSP21 code will move to the next Trouble Report to be worked, followed by the TSP22 circuit Trouble Report.  Then, the TSP23 circuit Trouble Report moves ahead of the other Trouble Reports for the circuits that have no TSP codes.  Upon completion of the repair/restoral of the TSP21, TSP22 and TSP23 circuits, work then continues on the Trouble Reports for the circuits that have no TSP codes.


## 3.7  Competition For Resources Between Provisioning and Restoration Priorities

In general, service providers should restore existing services assigned TSP priority before provisioning new service; an exception is the provisioning of services assigned emergency priority, which should always be done before the restoration of services assigned restoration priorities "2", "3", "4" or "5".  Restoration of any service assigned restoration priority "1" takes precedence over any other service assigned any other provisioning and restoration priority.


When two or more TSP services are competing for resources, the priority sequence listed below will ensure proper handling of these circuits:

- Restore TSP services with restoration priority of "1".

- Provision TSP services with provisioning priority of "E".

- Restore TSP services with restoration priority of 2, 3, 4, 5.

- Provision TSP services with provisioning priority of 1, 2, 3, 4, 5.

Using the priority sequence listed above, the following examples of two TSP services competing for the same resources at the same time, the underlined TSP service has the higher priority and should be worked on first:

- TSP code 2-1 and E-2 both in trouble status.      <u>2-1</u>

- TSP code 2-1 in trouble and E-2 to be provisioned.      <u>2-1</u>

- TSP code 2-1 to be provisioned and E2 in trouble.            <u>E-2</u>

- TSP code 2-1 and E-2 to be provisioned.                  <u>E-2</u>

## 3.8  TSP Installation Preemption

Where facilities and/or equipment are not available to install a service assigned a TSP priority, preemption (interruption of an existing service) of a non-priority or lower priority circuit may be required.  User consent is NOT required to preempt any user's existing service to provision an NSEP service assigned a provisioning priority level "E" (Emergency) or to provision an NSEP service assigned a provisioning priority level "1" through "5".


## 3.9  TSP Maintenance Preemption

Facilities of message circuits may be used for restoral of services assigned a TSP restoration priority after ensuring that sufficient message circuits are available for public switched network use.

Where facilities and/or equipment are not available to restore a service assigned a TSP restoration priority preemption (interruption of an active service) may be required.  Interruption of a non-priority or lower priority circuit is authorized for the purpose of restoring the service assigned a TSP restoration priority.

 To restore interrupted NSEP services: User consent is not required to preempt any user's existing service to restore any NSEP service assigned a restoration priority level from "1" through "5".

NSEP services: If no suitable spare or non-NSEP services are available, then existing NSEP services may be preempted to restore NSEP services with higher priority level assignments. When this is necessary, NSEP services will be selected for preemption in the inverse order of priority level assignment.

Service providers who are preempting services will ensure their best effort to notify the service user of the preempted service and state the reason for and estimated duration of the preemption.


# 4  ACCESS SERVICE INSTALLATION

Installation as used in this document pertains to that portion of the total provisioning process which starts when the order, e.g., "Work Order Record and Detail" (WORD) or equivalent is received by the ASP and includes installations, changes, and disconnects.


## 4.1  Service Order Activity

The ASC will order the access service(s) required to provide its overall service from the ASPs. Where applicable TSP provisioning and restoration codes should be on the WORD or equivalent.

The order, after processing by the Interexchange Customer Service Center (ICSC) or equivalent, will flow to the ASP, which will coordinate the access service turn-up with the ASC. The ICSC or equivalent is an Access Service Negotiation work group that will handle inquires and orders.  It is to serve as a point of contact for the access service needs of Interexchange Customers.  Where applicable, installation priority will be in accordance with the TSP Provisioning code ordered.


## 4.2  Establishing Interfaces

It is the responsibility of the ASC to arrange for suitable space and electrical power at the POT, if required. The space furnished shall be in a safe working area and accessible during normal working hours as determined locally to ASP personnel for installation and maintenance purposes.

Where digital equipment is utilized, synchronization/loop timing equipment and options should be verified.

The Frame Relay Service Provider should establish the circuit ID that will be used to coordinate trouble resolution.

## 4.3  Pre-Service Testing

The ASP should ensure the following before contacting the ASC to perform cooperative acceptance tests:

- That the access service has been installed correctly.

- That pre-service tests have been performed and the requirements met.

- That all pre-service test measurements have been recorded.

ASC personnel or their designate may be requested to participate in the pre-service testing activity.

## 4.4  Cooperative Acceptance Testing

Upon completion of the pre-service tests, the ASP will contact the ASC and advise that the access service is ready to be turned up. The ASC has the option of acceptance with or without cooperative acceptance testing. If the ASC requests cooperative acceptance tests, the ASP will coordinate all normal and additional acceptance testing. Test equipment compatibility should be verified at this time. The ASC is not obligated to accept the service prior to the due date.

When a DS-1 loopback device is deployed by the ASP, the subsequent dispatch to the End User's POT to perform "Cooperative Acceptance Tests" will be waived by the ASC. The ASC, upon request, will be provided the test results obtained by the ASP. If the ASC requests "Cooperative Acceptance Testing" be performed, they will be performed remotely. Excluding the following conditions, an ASP technician will not normally be dispatched to the End User's premises to perform tests. The conditions are:

- The DS-1 Service is not equipped with the DS-1 loopback device.

- Test results do not meet service acceptance immediate action limits and trouble is sectionalized to the ASP network.

- The unit is inoperable.

- Unless the ASC requests a dispatch.

The tests results will be viewed as valid (assuming they are within service parameters) for the purpose of service acceptance/maintenance.

When Intelligent NCTE is deployed by the ASP, the dispatch to perform Cooperative Acceptance tests will be waived by the ASC. The ASC, upon request, will be provided the remotely aligned tests results obtained by the ASP. If the ASC requests Cooperative Acceptance testing, the ASP will test remotely, using the diagnostic features of the Intelligent NCTE. Excluding the following conditions, an ASP technician will not normally be dispatched to the end user's location to perform Cooperative Acceptance tests. The conditions are:

- The unit is not equipped to perform the basic turn-up tests.

- The ASC requests specific Additional Cooperative Acceptance Tests, i.e., conditioning.

- The unit is inoperable.

- If the circuit does not meet Acceptance parameters.

## 4.5 Digital Data Special Access Services

The following test patterns can be used to perform cooperative testing when access is gained at two (2) points on the circuit. Each test unit transmits a known test pattern toward the other, and the data received by each is analyzed. It can also be used to do loopback testing if a 108 Type Test Line or other manual DSO loopback functions are provided.   The test device will attempt to frame on the received data and count bit and 1-second block error rates. Bit and 1-second block errors will be reported upon termination of the test, and must be possible for intermediate results to be reported at specified intervals.

## 4.6 Digital Data Services Stress Test Patterns

Any of four (4) repetitive patterns should be placed in the six-or seven-bit data field of the byte with the eighth bit set to one (1) and may be applied as follows:

**Table A.1 (From ANSI T1.510)**

| Test | Pattern Length Bytes | Binary Representation (see notes 1 & 2) | Test Interval | # of test (see note 3) | ES Test Limit |
|---|---|---|---|---|---|
| S1 | 100 100 | 1111 1111 0000 0000 | (see note 4) | 1 | 0 |
| S2 | 100 100 | 0111 1110 0000 0000 | (see note 4) | 1 | 0 |
| S3 | Continuous | 0100 1100 | (see note 4) | 1 | 0 |
| S4 | Continuous | 0000 0010 | (see note 4) | 1 | 0 |
| S5 (see note 5) | (see note 5) | (see note 5) | (see note 4) | 1 | 0 |

NOTES:

For 56 kbit/s service, these patterns will appear only in the customers' data bits.

All binary presentations are transmitted left to right.

One retest is allowed if the initial test fails.

3-minute intervals are currently used: longer intervals may be recommended by the service provider.  If test intervals of 15 minutes or longer are used, the test procedures, intervals and limits given in 8.1.2 and 8.1.3 should be followed.

This test utilizes all the test patterns defined above and, and as an option, may be used in lieu of any or all of the tests S1 through S4 if available.  S1 through S4 are run sequentially; a minimum pattern length of 200 bytes for S3 and S4 is suggested.

## 4.7 Digital Data Services Acceptance /Maintenance Requirements

These test patterns, selected by the OS Application or tester, are transmitted in the test direction. Each byte is repeated according to customer data rate. The first bit transmitted is shown on the right of the pattern.

DDS ACCEPTANCE / MAINTENANCE REQUIREMENTS

Test limits and objectives for 56/64 kbit/s service

**Table 5 (From ANSI T1.510)**

| Parameter Limit For: | Short-duration Tests 15-minute stages | | | | | | Long-duration Test 24 hour | |
| | ES | | | SES | | | ES | SES |
| | 15 min | 30 min | 45 min | 15 min | 30 min | 45 min | 24 hour | 24 hour |
|---|---|---|---|---|---|---|---|---|
| Access | 0 | $\leq 2$ | $\leq 3$ | 0 | 0 | $\leq 2$ (see note) | $\leq 60$ | $\leq 7$ |
| Transit | 0 | $\leq 2$ | $\leq 3$ | 0 | 0 | $\leq 2$ (see note) | $\leq 60$ | $\leq 16$ |
| End-to-End | 0 | $\leq 2$ | $\leq 4$ | 0 | 0 | $\leq 2$ (see note) | $\leq 120$ | $\leq 21$ |
| NOTE – Accept at 2 only if the cause of the SES is identified as an isolated event. | | | | | | | | |

## 4.8 Acceptance of DS-0/Voice Grade Service Added To DS-1 Facilities Already In Service

If the DS-0/Voice grade service is being extracted from the DS-1 facility at the POT cooperative acceptance tests should be performed from the ASC POT to the End-User POT. If the ASC does not extract the DS-0/Voice Grade Service at the ASC POT, in lieu of cooperative acceptance test, the ASP will perform applicable tests from the End-User POT through the ASP's Channel Unit and if requested provide test results to the ASC.

## 4.9 Acceptance of WATS Access Lines and Feature Group A Added To DS-1 Facilities Already In Service

If the DS-0/Voice grade service is being extracted from the DS-1 facility at the POT cooperative acceptance tests should be performed from the POT to the WATS Serving Office/Dial Tone Office. If the ASC does not extract the WATS Access Lines or Feature Group A at the ASC POT, in lieu of cooperative acceptance testing, the ASP will perform applicable Operational and Transmission tests from the WATS Serving Office/Dial Tone Office.  These tests will be performed through the ASP's Channel Unit and if requested provide test results to the ASC.

## 4.10 Acceptance of DS-1 Service

Acceptance testing parameters for DS-1 Services are addressed in the Facilities document.

## 4.11 Acceptance of DS-1 Service Riding Within an Existing DS-3 Service

Acceptance testing parameters for DS-1 Services riding within an existing DS-3 Service is addressed in the Facilities document.

## 4.12 Acceptance Testing Of DS-3 Service

Acceptance testing parameters for DS-3 Service is addressed in the Facilities document.

## 4.13 DS-3 Testing - Optical Interface

Acceptance testing parameters for DS-3 Testing is addressed in the Facilities document.

## 4.14 Remote Loopback Verification

In some cases, both the ASP and the ASC may have voice grade tone activated remote loopback devices in a circuit to aid in sectionalization. There are two equipment configuration scenarios that can exist:

- Tone activated loopback devices provisioned on both sides of the network interface at the ASC-POT; and

- Tone activated loopback devices provisioned on both sides of the network interface at the End User POT.

These devices should be identified and any conflicts resolved after pre-service testing and during cooperative testing. Cooperative testing will be required to insure that both devices activate and deactivate properly.

The possibility exists that both devices will be activated into the loopback mode during testing. When the deactivation tone is transmitted, the tone will be received by only one device, leaving the other device still in the loopback mode. Where devices cannot be returned to normal with tone local negotiations should occur to:

- Allow for the removal of one or more devices; or

- Develop specific documentation and testing procedures to ensure all devices are returned to normal when future maintenance activities are performed on these circuits.

The ASC will specify on its initial order to the ASP, any additional tests required at the time acceptance tests are to be cooperatively performed. However, additional tests may be requested by the ASC subsequent to its original order. In all cases, it is the responsibility of the ASC to use test equipment compatible with that being used by the ASP for such measurements. Additional billing may be applicable. Additional acceptance tests include but are not limited to the following examples:

- Attenuation Distortion

- Dial Pulse Percent Break

- Envelope Delay Distortion

- Frequency Shift

- Impulse Noise

- Inter Modulation Distortion

- Phase Jitter

Completion of the order will not be contingent on parameters beyond those specified in the technical reference and/or tariff description for each of the respective access services.

To mitigate inadvertent loopbacks, 64kb data services should be provisioned with loopback recognition timers. Where loopback recognition timers are an ordering option for such services this option should be selected.

## 4.15 Completion Reporting

Upon acceptance of the ASP access service by the ASC, the ASP will record the name of the ASC representative and the date the service is accepted. When an access service has a TSP code, this code should be verified between the ASC and ASP at this time.

## 4.16 Disconnection of Service

Disconnect procedures will be in accordance with ASP developed practices.

## 4.17 Coordinated Conversions

Coordinated conversion is a process that may be used to facilitate a change in service from one ASC to another that involves the reuse of a portion of the ASP provided equipment and/or facilities previously assigned to the services being converted. It requires the issuance and processing of related disconnect and connect orders and coordination of these orders throughout the entire cutover process.

> Note: In some cases, the new ASC and the former ASC could be the same entity (e.g., when an ASC rehomes an Access Service to a new Point of Termination).

The new ASC is expected to bear full responsibility for the overall installation and coordination of the various service orders and all related activities involved in the provision of its end-to-end service. The actual ASP work operations performed remain in control of the ASP according to mutually agreed upon schedules.

The new ASC will establish and coordinate conversion activities with the ASP, former ASC and end user when required. Those activities will include but are not limited to:

- Completion Testing and Notification

- Requests for Continuation of Service,

- Conversion Timing,

- Circuit Release,

- Circuit Conversion Sequence.

- TSP verification, where applicable.

Every effort must be made jointly by the new ASC and the ASP to successfully complete the conversion. If a new ASC encounters difficulties in activating its end-to-end service after work has begun or acceptance tests have been completed on the ASP provided facilities, the new ASC may negotiate and coordinate continuation of the service with the former ASC and involved ASP. Following successful negotiations for continuation of service, the new ASC must advise the ASP and the former ASC that continuation of service has been negotiated and restoral procedure should be started.

Since continuation of the former ASC service does not automatically defer the due date of the disconnect order, the new ASC must request the former ASC to contact the ASP ICSC, or equivalent, to request a due date change in order to prevent the disconnect of the former service. This must take place prior to the disconnect due date.

It is the responsibility of the ASP to inform the new ASC that all work involved in restoring the former ASC service and subsequent cut-over activities of the new ASC facilities is work over and above that required for normal coordinated conversion cut-overs. This work may result in appropriate additional labor charges.

## 4.18 Rearrangements

A rearrangement as described in this document is a coordinated activity initiated by either the ASP or the ASC, which will usually be transparent to the ASC's end user and will not change the operation or design of the affected circuits(s). In the rearrangement process, circuit releases, rearrangement timing, and completion testing will be negotiated on an Individual Case Basis (ICB) by the initiating party. If rearrangement affects transmission parameters, both entities will cooperatively verify that circuits are within acceptance limits.

## 4.19 Change Orders

Change orders cover any changes in the design or operation of an existing circuit or circuit group(s) administered through the ICSC or equivalent center procedures.

# 5 ACCESS SERVICE MAINTENANCE

The ASC is responsible for performing all necessary tests to determine the nature of the trouble. If the trouble is found to be in the ASP provided service, the ASC will report the trouble to the ASP's designated trouble reporting office.

The ASP will be responsible for accepting, from the ASC, trouble reports sectionalized to ASP facilities and/or equipment. The ASP will test cooperatively or independently to assist in trouble sectionalization.

## 5.1 Trouble Reporting

The following is the type of information that should be exchanged at the time of the trouble referral.

- ASP circuit identification number.

- Date and time of trouble referral.

- Nature of the trouble and any other information that may be of assistance to the ASP.

- The name or initials and the telephone number of the person referring the trouble.

- Trouble report number(s) or equivalent and the name or initials of the person accepting the trouble.

- TSP restoration priority, where applicable.

When ASPs and ASCs are using different methods of in-service Performance Monitoring (i.e., scanned vs. dedicated), differences will occur in measured performance. The performance reported by the provider using dedicated monitoring, will be more indicative of the actual service. These reports should be accepted by the other entity.

## 5.2 Sectionalization and Repair

While trouble sectionalization is the responsibility of the ASC, it could involve cooperative testing with participation by both the ASP and ASC.

Maintenance problems sectionalized to HiCap facilities carrying the Switched Access Service/Special Access Services should be tested using the Facility Document.

The ASP will coordinate the isolation of the trouble within the ASP provided service.

Communication may also be necessary on services that involve an ASC, their intermediate agent, and an ASP. In these situations the cooperation of all three organizations may be necessary to expedite trouble clearance. When it is necessary for communication between the ASC and ASP, it is required that this contact be made through the intermediate agent.

The ASP employees will limit their repair activities to ASP provided facilities and/or equipment. No attempt should be made to adjust or repair equipment belonging to the ASC. The ASC or others may not rearrange, move, disconnect, remove or attempt to repair any equipment or facilities provided by the ASP.

When trouble tickets are being closed out between an Access Service Provider/Access Service Customer, whether they are using a mechanized system or a verbal notification, the disposition should be furnished by the company clearing the trouble, and the following information shall be provided:

- Circuit ID/telephone number,

- Trouble Ticket Number (ASC/ASP number),

- Name or initials of person closing out trouble,

- Nature of the trouble found (e.g., bad cable),

- Resolution details (e.g., cut over to new cable),

- ASC will inform ASP if this trouble is measured,

- Date and time trouble cleared,

- Date and time trouble referred from the ASC to the ASP,

- Date and time trouble report closed,

- No access time (the period of time that the service is unavailable for maintenance activities),

- Service charge information, if applicable,

- Status of circuit(s) (working or made busy).


When there is a disagreement on the disposition, the parties engaged in the dispute shall document their respective positions, and the names of the individuals engaged in the dispute for audit purposes. Escalations if necessary shall be in accordance with identified procedures.

If after a trouble has been cleared and either the ASP or ASC wishes to change the Disposition, such changes shall be negotiated.


## 5.3  Synchronization

Improper synchronization can result in circuit impairments that should be investigated and synchronization problems corrected. Problems that cannot be resolved should be referred to your Synchronization Coordinator. The NGIIF publishes a Service Provider Contact Directory, which contains the number for the company's Synchronization Coordinator. This is updated, as required, and is available from your companies' NGIIF Representative.

If the ASC/ASP has its own primary frequency standard that meets the CCITT standard for national networks (G.811, G.822), synchronization of the digital SS7 link(s) will be by the plesiochronous method of operation. If either network does not conform to the CCITT standard, the non-conforming company will use loop timing to accept SS7 link(s) timing from the conforming company. When the link interface is a DSOA interface, the interface must be plesiochronous or timed to the same source as the facility.

## 5.4  Digital Data Special Access Services

The following test patterns can be used to perform cooperative testing when access is gained at two (2) points on the circuit. Each test unit transmits a known test pattern toward the other, and the data received by each is analyzed. It can also be used to do loopback testing if a 108 Type of Test Line or other manual DSO loopback functions are provided.

The test device will attempt to frame on the received data and count bit and 1-second block error rates. Bit and 1-second block errors will be reported upon termination of the test, and must be possible for intermediate results to be reported at specified intervals.

## 5.5  Digital Data Services Stress Test Patterns

Any of four (4) repetitive patterns should be placed in the six-or seven-bit data field of the byte with the eighth bit set to one (1) and may be applied as follows:

**Table A.1 (From ANSI T1.510)**

| Test | Pattern Length Bytes | Binary Representation (see notes 1 & 2) | Test Interval | # of test (see note 3) | ES Test Limit |
|---|---|---|---|---|---|
| S1 | 100 100 | 1111 1111 0000 0000 | (see note 4) | 1 | 0 |
| S2 | 100 100 | 0111 1110 0000 0000 | (see note 4) | 1 | 0 |
| S3 | Continuous | 0100 1100 | (see note 4) | 1 | 0 |
| S4 | Continuous | 0000 0010 | (see note 4) | 1 | 0 |
| S5 (see note 5) | (see note 5) | (see note 5) | (see note 4) | 1 | 0 |
| NOTES: | | | | | |
| For 56 kbit/s service, these patterns will appear only in the customers' data bits. | | | | | |
| All binary presentations are transmitted left to right. | | | | | |
| One retest is allowed if the initial test fails. | | | | | |
| 3-minute intervals are currently used: longer intervals may be recommended by the service provider.  If test intervals of 15 minutes or longer are used, the test procedures, intervals and limits given in 8.1.2 and 8.1.3 should be followed. | | | | | |
| This test utilizes all the test patterns defined above and, and as an option, may be used in lieu of any or all of the tests S1 through S4 if available.  S1 through S4 are run sequentially; a minimum pattern length of 200 bytes for S3 and S4 is suggested. | | | | | |

## 5.6 Digital Data Services Acceptance/Maintenance Requirements

These test patterns, selected by the OS Application or tester, are transmitted in the test direction. Each byte is repeated according to customer data rate.

DDS ACCEPTANCE / MAINTENANCE REQUIREMENTS

**Table 5 (From ANSI T1.510)**

| Parameter Limit For: | Short-duration Tests 15-minute stages | | | | | | Long-duration Test 24 hour | |
|---|---|---|---|---|---|---|---|---|
| | ES | | | SES | | | ES | SES |
| | 15 min | 30 min | 45 min | 15 min | 30 min | 45 min | 24 hour | 24 hour |
| Access | 0 | $\leq 2$ | $\leq 3$ | 0 | 0 | $\leq 2$ (see note) | $\leq 60$ | $\leq 7$ |
| Transit | 0 | $\leq 2$ | $\leq 3$ | 0 | 0 | $\leq 2$ (see note) | $\leq 60$ | $\leq 16$ |
| End-to-End | 0 | $\leq 2$ | $\leq 4$ | 0 | 0 | $\leq 2$ (see note) | $\leq 120$ | $\leq 21$ |
| NOTE – Accept at 2 only if the cause of the SES is identified as an isolated event. | | | | | | | | |

## 5.7 Maintenance of DS-0/Voice Grade Service Within DS-1 Facilities

If initial testing of the DS-0 Service indicates the trouble is toward the DS-1 Service/facility the following procedures should be followed:

- Use test equipment to extract the DS-0/Voice Grade service from the DS-1 bit stream. The ASC will perform a cooperative test with the ASP from the ASC POT location to either the End User POT or the ASP HUB location.

- If the ASC does not normally staff the POT or have remote test access, the ASP will, upon an ASC request, determine if the trouble is at the DS-0 level, which may involve substituting the channel unit.

- If changing the channel unit does not clear the trouble, the ASC will dispatch to their POT to perform cooperative tests.

## 5.8 Maintenance of DS-1 Service

Maintenance parameters for DS-1 Services is addressed in the Facilities document.

## 5.9 Chronic Trouble of DS-1 Service

Maintenance parameters for Chronic Trouble of DS-1 Service is addressed in the Facilities document.

## 5.10 Maintenance of DS-1 Service Within A DS-3 Service

Maintenance parameters for DS-1 Service within a DS-3 Service is addressed in the Facilities document.

## 5.11 Maintenance Testing Of DS-3 Service

Maintenance requirements for the testing of DS-3 Service is addressed in the Facilities document.

## 5.12 DS-3 Testing - Optical Interface

Maintenance requirements for the testing of DS-3, Optical Interface, are addressed in the Facilities Document.

## 5.13 Verification Tests

After each trouble has been cleared the ASP will contact the ASC to advise that the trouble has been cleared and the nature of the trouble found and action taken.

If the requested tests are other than those specified for the type of service involved, the ASP should notify the ASC that the time required to perform these additional tests will be billed to the ASC.

When repair verification tests identify a trouble that was not apparent due to the nature of the original trouble, clearance activity will continue until the service is restored.

Where remote loopback devices have been activated in the process of performing maintenance tests, verification should be made that all loopback devices in the circuit are returned to normal.

## 5.14 Make-Busy of Switched Access Terminated Services

Requests for make-busy may be categorized as follows:

- Single Circuit

- Trunk Group (facility failure)

- Trunk Group (preventive maintenance)

Single Trunk Make-Busy

- An ASC requesting an ASP to make-busy a line terminated service should contact the ASP responsible for the access service. The ASC shall provide the ASP with the necessary information.  At the time of request, the ASC should indicate whether the circuit is busy or idle and whether it wants the signaling leads opened (disabled).

- Upon receipt of the request, the ASP shall determine the condition of the circuit (idle or seized).  If idle, and requested by the ASC, the ASP will leave the signaling leads closed to enable the ASC to test into the switching machine.  The ASP will then call the appropriate work center and request a make busy of the circuit.  If the circuit has a seizure on it, the ASP will advise the ASC that the signaling leads will be opened until the seizure is removed.

- If trouble is experienced on the circuit while it is made busy and the signaling leads are closed, the ASP should disable them and notify the ASC.  The ASC must inform the ASP upon final completion of its tests and coordinate the removal of the make-busy.

Trunk Group Make-Busy (Facility Failure)

- In the event the ASC detects a facility or equipment failure, the ASC will advise the ASP of the involved trunks and the need to have them made busy.  Likewise, if the ASP detects a facility or equipment failure, the ASP will have the trunks made busy and signaling leads disabled, when required.  The ASP will then advise the ASC of the action taken.

- When the facilities and/or equipment have been restored the ASC will coordinate removal of the make-busy.

Trunk Group Make-Busy (Preventive Maintenance)

- If an ASC requests a trunk group be made-busy for preventive maintenance purposes, the request will only be honored outside the normal business day.  Such requests could have an impact upon other users of the switching machine if honored during the normal business day.

- Upon receipt of this type of request, the ASP should advise the ASC that this is additional labor and is billable.  If the ASC agrees, the request should be honored.  The time required to make the circuits busy, and later, to remove the make-busy is billable as additional labor.  For example, if the ASC requests to have an individual trunk released while they make a specific test (and then release another and so on), the time is billable.  Upon completion of the tests, the ASC must coordinate the removal of the make-busy.

## *5.15 Expedited Make-Busy*

The ASC may request an expedited circuit(s) make-busy.  Such requests are to be handled by ASP on an expedited basis.

If the request for an expedite cannot be handled on an expedited basis the ASP will inform the ASC.

## *5.16 Requests for Circuit Trace*

It may become necessary to request a hold and trace in order to resolve a difficult trouble that cannot be identified by conventional testing methods.  This request should be handled on an expedited basis.  When an end user is involved, the ASP will hold the call and release the end user.  When the trace is completed, sectionalization and repair should take place.

## *5.17 Emergency Call Tracing*

Emergency Call Tracing is directed toward identifying the source of an in-progress call for urgent physical assistance.  These traces may require both ASC and ASP involvement.  An ASC and/or ASP receiving such a request will initiate the trace on an expedited basis recognizing that human life may be at stake.  Information relative to these traces will be handled according to local security guidelines.

The originator of an emergency call trace assumes responsibility of the validity of a trace request and also is the controlling entity. These traces may require both ASC and ASP involvement. An ASC and/or ASP receiving such a request will initiate the trace on an expedited basis recognizing that human life may be at stake. When an emergency trace is passed to an ASC, the ASC will trace the call to the distant ASP and provide the distant ASP with information to continue the trace. After completion of the trace, the distant ASP will provide the source information to the originator, either directly, via the ASC or the originating ASP may elect to remain on line throughout the trace. Security of the information relative to these traces will be handled according to local guidelines.

## 5.18 Routine Maintenance Activities

It is the recommendation of the NGIIF that all routine maintenance and scheduled work activities be performed during hours of minimum traffic (e.g., during an 11:00 pm to 5:00 am "maintenance window") so that any inadvertent failure impacts the least number of customers.

At a minimum, high risk, potentially service affecting maintenance and growth procedures should be scheduled during weekend and off-hours. The overall methods, procedures and scheduling of these work activities should be reviewed by a second tier maintenance organization.

The activities that may affect other network service providers must be coordinated, which includes both intra- and inter-carrier networks.  (See NGIIF Reference Document, Section III, Installation and Maintenance - SS7).

Non-Scheduled Work Activity - If customer service is being impacted, the minimum work activity will occur to restore the system to a stable performance state.  Complete system recovery activity will be scheduled for the next maintenance window period.

## 5.19 Trouble Report Status

The ASP and/or ASP receiving the initial trouble referral shall provide a status on the disposition of that referral based on local agreements negotiated at the time of referral or requested on an individual case basis.

Subsequent to the initial status report on the disposition of the trouble report, periodic statuses shall occur based on the following criteria:

- When the trouble has been isolated

- When there is a significant change in the status of the trouble.

- The negotiated status interval has expired.

Where mechanized trouble notification is utilized, the receiving company shall status their appropriate systems, in addition it shall be the responsibility of the company issuing the trouble report to poll the mechanized status system for the status of the trouble report.

Escalations if necessary shall be in accordance with identified procedures.

## 5.20 Network Modification Notification

A Network Modification is any type of planned equipment, software, trunk or facility activity that has the potential to significantly affect interconnected networks (e.g. rearrangement of existing network elements, switch homing arranges, SS7 rehoming).

The NGIIF has developed the following guidelines outlining the medium by which internetwork affecting maintenance activity notification will be provided to the interconnected company and the time frame prior to the planned activity:

- Notification when possible should be made at least 5 working days prior to the planned change activity.

- Notification should be made in the form of:

    – E-Mail (recommended where available),

    – FAX or,

    – Telephone call.

- Notification should be provided to the affected company's appropriate notification center. Contact information is included in the NGIIF Service Provider Contact Directory. An example of a notification form is located in the NM Section, Part VI, of the NGIIF Reference Document.

When a Network Modification is scheduled that could significantly affect traffic between directly interconnected networks, it is recommended that the interconnecting parties notify each other, prior to the event.

The following information should be exchanged at the time of notification:

- Originator, (company name/contact number)

- Affected Network Element

- Date and Time of the Change

- Expected Duration

- Traffic Types Affected During Change

- Description of the Work to be Completed

# 6  END-TO-END AND INTERCARRIER TESTING

Circuit networks comprising ASP and ASC services may experience trouble conditions that cannot be isolated by each carrier testing and maintaining its own services. Although, the portions provided by each ASC and each ASP apparently perform properly, a trouble may be identifiable on an end-to-end service. In such cases the ASC may require coordinated testing. It is the responsibility of the ASC to coordinate inter-carrier and/or end-to-end testing with each sectional provider (i.e., other ASCs, ASPs). ASP participation in coordinated testing may be billable to the ASC.

# 7  ESCALATIONS

Escalation is a means of bringing provisioning and maintenance problems to the attention of individuals responsible for or having appropriate authority to initiate corrective action. When either the ASC or ASP is experiencing provisioning or maintenance difficulties that are not being resolved, the ASC and/or ASP shall contact the designated reporting office and request status from the responsible technician or first level supervisor. If the ASC or ASP is not satisfied with the effort to resolve a problem, the ASC and/or ASP may escalate according to locally negotiated guidelines.

# 8  TEST LINES

Feature Group A (FG A, line-side terminated) Switched Access Service provides seven digit access to balance (100 type) and milliwatt (102 type) test lines in the terminating direction where equipment is available.

Access to ASP test lines for WATS Access Lines where available will be provided.

ASC may obtain test line access information by contacting the Test Line Coordinator of the company with which they are performing testing. The contact number for ASP Test line Coordinators are listed in the NGIIF Service Provider Contact Directory under Testline Coordinator.

# 9 ADDITIONAL BILLING

The additional billing information contained in this document is of a general nature.

Provision has been made for billing the ASC for labor costs which are in excess of those that the ASP would have incurred had normal installation and repair functions been performed during scheduled hours. Provision has also been made for billing labor charges for work other than normal installation and repair.

## 9.1 Overtime Installation and Repair

Overtime is the time spent by ASP personnel doing installation and repair functions outside their scheduled working hours. The ASP must insure that internal documents include the appropriate entry to establish and uniquely identify any charges, which result from restoration or installation of a service with TSP assignments.

When an ASC requests work to be done outside scheduled hours, such requests should be coordinated through the ASP.

The ASP employee should ascertain the nature of the work being requested and the specific date and time the ASC wishes to begin the work.

Repair and installation overtime hours, which are considered billable to the ASC, are outlined in the following:

- When ASP personnel are required to work on a non-scheduled basis, the billable overtime hours begin at the start time requested by the ASC and end when the job is completed or the ASP personnel have been released by the ASC.  Only those hours worked outside scheduled hours are billable.  This includes travel time to and from a work location if a change in work location is required.

- When ASP personnel are called out for ASC installation or repair work, the normal travel time from home, the work time, and the normal travel time back home are billable.  A call out of a ASP employee is subject to a minimum charge of 4 hours.

## 9.2 Additional Cooperative Acceptance Testing

Any transmission measurements or signaling tests over and above those specified as the normal acceptance test requirements in the Access Service Technical References and/or the appropriate tariff(s) are considered additional and will be billed to the ASC.

## 9.3 Stand-by Time

Stand-by Time includes all time in excess of one half (l/2) hour during which ASP personnel stand-by to make cooperative tests to verify repair of a given service with the ASC.

## 9.4 Non-Scheduled Testing

Non-scheduled testing can be requested by an ASC and may consist of any test, e.g., loss, noise, etc. which the ASC may require.

The ASC may request non-scheduled testing when maintenance testing, end-to-end service testing, intercarrier testing, or other testing is desired and ASP assistance is required.

Requests for and agreement to participate in the performance of an ASC's non-scheduled tests must be between the ASC and the ASP and will be performed at a mutually agreed upon schedule.  The ASP should advise the ASC that non-scheduled testing is billable.

The ASC may use the provisions of non-scheduled testing to schedule meets of ASP, Vendor, and ASC technicians.

If during non-scheduled testing a trouble is found in ASP provided facilities, the ASC will not be billed for the time spent repairing any ASP specific trouble found.

## 9.5  Maintenance of Service Charge

The ASC shall be responsible for payment of a Maintenance of Service Charge for dispatches to the ASC location and/or its end user's premises by the ASP if either of the following conditions apply:

- Where the trouble results from equipment or communications systems provided by other than the ASP

- In the event the trouble is not found to be in the ASP facilities

If trouble is subsequently found to be in the ASP equipment or facilities, where a Maintenance of Service Charge has been applied, the charge will be canceled.

## 9.6  Other Labor

As agreed to by the ASP and the ASC, additional labor not identified by the following, may also be undertaken:

- Overtime Installation and Repair

- Additional Cooperative Acceptance Testing,

- Stand-by Time,

- Non-scheduled Testing,

- Maintenance of Service Charge,

- TSP Service

Requests from the ASC to provide additional labor, not identified above, must be mutually agreed to by the ASP and the ASC before such work is undertaken.  This work is billable.

# 10 ACCESS SERVICES PROVIDED BY MULTIPLE EXCHANGE CARRIERS

These procedures apply when Access Service is provided by two or more ASPs within the same LATA.

The ASC will order from the ASPs the access service(s) required to provide its overall service.

For multi-ASP Access Service, it is recommended that a single Access Service Provider Coordination (ASPC) point, specific to the installation function being performed, be specified.

Before an Access Service Request (ASR) is issued by the ASC for an access service involving multiple ASPs, the ASPs involved should have a mutually agreeable working arrangement in place to allow one of the ASPs to be the ASPC, for the installation of access service.

Each ASP is responsible for working cooperatively with ASCs and other ASPs to ensure that access services are installed, tested, and turned up in a timely manner and that trouble conditions are resolved without undue delay and participate in repair verification as required.

## 10.1 Installation

Installation as used in this document pertains to that portion of the total provisioning process which starts when the order, e.g., "Work Order Record and Detail (WORD) or equivalent is received by the ASPs and includes installations, changes, and disconnects.

The ASPC will:

- Ensure that its company's equipment and facilities are installed and tested by the Plant Test Date (PTD).

- Receive and log status from the Other Access Service Provider (OASP) on the Designed Verified and Assigned Date (DVA) or equivalent. If the OASP has not provided status within 24 hours after DVA or equivalent, the ASPC will contact the OASP and request status.

- Prior to cooperative acceptance tests, schedule and coordinate pre-service tests to ensure that the overall access service is installed correctly and meets design parameters.

- Upon completion of the pre-service tests, the ASPC will contact the ASC and advise that the access service is ready to be turned up. The ASC has the option of acceptance with or without cooperative acceptance testing.  The ASC is not obligated to accept the service prior to the due date.

- When an access service has a TSP code, this code should be verified between the ASPC and OASP.

When Intelligent NCTE is deployed by the ASP, the dispatch to perform Cooperative Acceptance tests will be waived by the ASC. The ASC, upon request, will be provided the remotely aligned tests results obtained by the ASP. If the ASC requests Cooperative Acceptance testing, the ASP will test remotely, using the diagnostic features of the Intelligent NCTE. Excluding the following conditions, an ASP technician will not normally be dispatched to the end user's location to perform Cooperative Acceptance tests. The conditions are:

- The unit is not equipped to perform the basic turn-up tests.

- The ASC requests specific Additional Cooperative Acceptance Tests, i.e., conditioning.

- The unit is inoperable.

- If the circuit does not meet Acceptance parameters.

The OASP will:

- Ensure that its company's equipment and facilities are installed and tested by PTD.

- Contact the ASPC and provide circuit status.

- Cooperate with the ASPC to perform the pre-service tests and acceptance tests as required.

- When an access service has a TSP code, this code should be verified between the OASP and ASPC.

The end user ASP for Special Access and WATS Access Lines will arrange for field forces to be dispatched when required and participate in the acceptance testing with the ASC.

When Intelligent NCTE is deployed by the ASP, the dispatch to perform Cooperative Acceptance tests will be waived by the ASC. The ASC, upon request, will be provided the remotely aligned tests results obtained by the ASP. If the ASC requests Cooperative Acceptance testing, the ASP will test remotely, using the diagnostic features of the Intelligent NCTE. Excluding the following conditions, an ASP technician will not normally be dispatched to the end user's location to perform Cooperative Acceptance tests.

The conditions are:

- The unit is not equipped to perform the basic turn-up tests.

- The ASC requests specific Additional Cooperative Acceptance Tests, i.e., conditioning.

- The unit is inoperable.

- If the circuit does not meet Acceptance parameters.

For FG A, the first point of switching ASP will arrange for field forces to be dispatched when required and participate in the acceptance testing with the ASC.

## 10.2 Maintenance

The ASC will be responsible for acceptance of trouble reports from its end user.  The ASC should first test its facilities to determine if the trouble is in its network.  If a trouble is found, the ASC will clear the trouble and no referral to an ASP is necessary.  If the trouble is sectionalized by the ASC towards a connecting ASP the trouble report will be referred to the appropriate ASP based on the following criteria:

- Switched Services - the ASP with the 1st point of switching.

- Multipoint Specials (ASP Bridged Services) - the ASP that is providing the bridging function.

- Point-to-point Specials - at the discretion of the ASC based on available information/analysis.

The ASP(s) will work cooperatively with the ASC to sectionalize the trouble.

The following information should be exchanged when handing off or referring the trouble:

- Trouble report number or equivalent

- Contact telephone number

- Circuit ID (i.e. name or initials)

- Time and date report was received from ASC

- ASC testing information (If requested by ASP)

- Contact ID (41 Character CLCI)

- Non-Circuit specific (Circuit ID may not be appropriate)

- Trouble reported

- Other information that may be of assistance (e.g., history, subsequent reports)

Upon receipt of a trouble report from the ASC, the ASP will conduct, independently or cooperatively with the ASC, tests required to determine if the trouble is in its own equipment and facilities or the point of interface of an adjacent OASP(s).

If the trouble is found to be in the ASP's equipment or facilities, the trouble report will be closed out with the ASC and the following information will be provided:

- Trouble report number or equivalent

- Date & Time Cleared

- Status of Circuit(s) [temporary or permanent repair]

- -- If temporary, estimated time of restoral

- Contact name or initials and telephone number of the person closing out the report

- Type & Nature of trouble found and action taken

- ASP Testing Information (if Requested by ASC)

- Circuit ID (e.g., 41 character CLCI where applicable)

If no trouble is found in the ASP's own network, they shall refer/hand-off the trouble to the OASP and provide the following information:

- Trouble report number or equivalent (ASC)

- Contact telephone number (ASC)

- Circuit ID (ASC) (i.e., name or initials)

- Time and date report was received from ASC

- ASP Testing information (If requested by OASP)

- 41 Character CLCI for circuit specific problems

- Non-Circuit specific (If applicable e.g., 41 CLCI character where available)

- Trouble reported

- Other information that may be of assistance (e.g., history, subsequent reports, ASC Testing information, if available)

In the event a premature or improper hand-off has occurred, the ASP will resume cooperative testing with the OASP in order to sectionalize the trouble.

When the ASP has referred/handed off the trouble report to an OASP, the ASP will close out the trouble report with the ASC and provide the following information:

- Trouble report number or equivalent (ASC)

- Trouble report number of OASP

- Time and date report was referred/handed off to the OASP

- Contact telephone number (OASP)

- Contact ID (OASP) (i.e., name or initials)

- ASP Testing information (If requested by ASC)

- Trouble disposition (Test OK, NTF, Found OK)

- Circuit Identification (if applicable e.g., 41 character CLCI where available)

- Contact Name or initials of person closing the report

If the trouble report requires further hand-off/referral by the OASP to succeeding ASPs, the identity of the OASP switches to ASP when the referral is made.

The OASP will:

- Cooperatively test with the ASP to determine trouble location.

- Accept the trouble report when sectionalized into its equipment or facilities.

- The OASP will provide status to the ASC upon request.

- Upon clearing trouble, contact the ASC to close out the trouble report.

Trouble Ticket Exceptions - The following information is provided in an effort to assist service providers and service Customers in the resolution of troubles that fall outside of the normal ticket resolution flow once the original ticket has been closed out with the ASC.

Request for Test Assistance - When a request for a test assist is made to an ASP, the ASP shall provide the necessary assistance to facilitate the request.   A ticket (non-measured) shall be created for administration of test assist referrals. A subsequent request for a test assist may result in additional tickets being created.  In the event that additional tickets are created all relevant information from the prior trouble tickets/test assist tickets should be cross-referenced.

Request for Escalation Assistance From ASC - It is the responsibility of all service providers and service customers to work cooperatively to resolve all trouble reports as expeditiously as possible.  The ASC is responsible for escalations to an OASP associated with trouble tickets when the trouble has been isolated/referred by an ASP to an OASP.  When a request for escalation assistance is made by the ASC to an ASP, the ASP will provide any information concerning escalation numbers or names that they may have to the requesting ASC.  At the ASC manager's request, the ASP manager may participate on a phone call in an attempt to assist the ASC in escalating to the OASP.  If the ASC refers the problem back to the ASP, it should be understood that the process will reinitiate at the escalation level when the problem was initially referred into the OASP.

In the event the trouble cannot be sectionalized (e.g., no trouble found, intermittent type of problems), then the ASC and all ASPs/OASPs will cooperatively work together (e.g., cooperative testing) to locate and/or isolate the problem.  Once the problem has been sectionalized then the previously developed process for ASP/OASPs shall be followed.

If repair verification with the ASC indicates trouble is still present, the ASP attempting to close out the trouble report will reinitiate testing with the other ASP(s).


## 10.3 Common Completion

A common completion date will be utilized by all involved ASPs. Therefore, no ASP may complete its order until the entire Access Service is completed and accepted by the ASC.


## 10.4 Jeopardy

If one or more ASPs cannot complete its portion of the overall Access Service on the Due Date, this should be considered a jeopardy situation by all ASPs involved. If, after a specified period of time (to be determined locally) past the due date, the overall Access Service remains incomplete due to ASP problems, those ASPs who completed their portion of the Access Service will review the status of the incomplete portions via the ASPC. The ASP whose portion of the work is incomplete will determine the actual or approximate duration of the existing jeopardy condition and notify the ICSC or equivalent.