STEP 4.40

TECHNICAL FEASIBILITY

In this step, the resulting architecture-specific technical description(s) and/or the target architecture description are assessed for their technical feasibility. These are "on paper" verification, **not** technical trials.

The completion of this step results in a detailed report describing a set of current, planned and/or future solutions to the requested need.

The Step 4.00 Output Form provides the ONA Services User Guide information for those ONA Services which can meet the need with current or planned network capabilities.

If the requested functionality can be provided through current or planned network capabilities, the process moves forward to Step 5.00; otherwise the request is deferred. Included in the final documentation of deferred requests will be a description of those activities needed to overcome identified obstacles and current plans to address these obstacles. Overcoming the technical issues (Steps 4.33 and 3.33) associated with deferral of a request may be pursued through the processes identified in Issue 016-TWC, "ESP Input to ILEC Network Planning Processes."

STEP 4.00 OUTPUT FORM

ESPR-xxx	GENERIC NAME:

Current/Planned ☐	Future ☐	Description XX of YY.

SERVICE OPERATION (4.20)

TECHNOLOGICAL AND FEATURE INTERACTIONS (3.20)

NETWORK ARCHITECTURE (4.20/4.30)

PHYSICAL AND LOGICAL INTERFACES (4.20)

OTHER (For deferred request, include technological issues to be resolved, as identified in 4.30)

FOLLOW UP ACTIVITIES

FOLLOW UP ACTIVITIES

Once candidate services have been defined through the Systematic Uniformity process, a number of useful activities can be pursued within the NIAC which will encourage the broad dissemination of information on network needs and capabilities and increase the probability of the candidate service(s) eventual deployment and availability.

Such activities include:

Industry Interest Group Activities, such as promotional workshops presenting information collected in steps 1 through 4 on a particular requested service in order to cultivate a better understanding of its utility and stimulate interest in that service; formal or informal surveys of the interest in, or utility of, a defined capability. This process can generate industry discussion and feedback on the issues using the Systematic Uniformity process's output documentation.

Information Dissemination, through such activities as tariff filing notification; deployment notification through updating of the ONA Services User Guide deployment database, the circulation of ESP-outreach publications or informal announcements; sharing results of technical trial experiences; and, possibly, in the form of an NIAC newsletter.

External Liaison Activities, such as interaction with standards development bodies where actions by such outside agencies may be necessary in order to move forward on the uniform development and deployment of ONA services.

Encouraging Direct, One-on One Exchange of Information Between Individual ILECs and ESPs. This has been facilitated by the creation of guidelines for nondisclosure agreements. The NIAC can also encourage participation in technical trials by offering the opportunity for an ILEC anticipating such trial to invite interested ESPs to contact them directly. The NIAC can also encourage ESPs to develop illustrative material or information on the utility of a service and to make that material available to interested ILECs (subject to non-disclosure agreements, where appropriate).

Initiating Future NIAC Activities, such as spin-off service requests which are identified in the course of a requested service's definition; issues to improve upon or update the Systematic Uniformity Process itself; and issues which create new processes or mechanisms to facilitate the effective functioning of the NIAC generally.

These post-Systematic Uniformity Process activities are not formal "steps" or rigidly structured processes. Rather, regular NIAC meetings should provide the opportunity to address these, or similar activities, as needed.

RECOMMENDATIONS ON IMPLEMENTATION OF

THE SYSTEMATIC UNIFORMITY PROCESS

GENERAL OBSERVATIONS

The implementation of systematic uniformity process for new ONA services will require new approaches to existing NIAC procedures.

Normally, specific ONA issues are designed as either technical or non-technical and the consideration of each issue takes place in the initial discussion of the issue. The pervasive nature of the systematic uniformity process will stimulate activities in both the technical and non-technical issues; but this process is primarily for the technical ONA issues.

Furthermore, the ongoing involvement of the Interindustry Advisory Group (NIIF), responsible for procedural fairness and the administration of NIAC activities, will be required to facilitate the effective and timely execution and monitoring of NIAC activities associated with systematic uniformity.

The recommended procedures for the implementation of systematic uniformity are based on the following observations:

1 – The ongoing nature of the systematic uniformity process will require coordination by a standing coalition of NIAC expertise to monitor activities and procedures associated with systematic uniformity.

2 – Subject matter expertise related to specific ONA services and associated matters resides primarily in the working committees.

3 – NIAC administrative and procedural responsibilities reside with the NIIF.

4 – The timely and efficient execution and monitoring of the systematic uniformity process requires the concerted and objective application of recourses from both of the two NIAC working committees as well as the NIIF.

The following recommendations for the implementation of the systematic uniformity process reflect the above considerations.

IMPLEMENTATION OF THE SYSTEMATIC UNIFORMITY PROCESS

RECOMMENDATION #1

TASK GROUPS WORKING ESP ONA SERVICE REQUESTS

Each ESP request introduces into and accepted by the NIAC will be assigned a request tracking number and worked through the systematic uniformity process by a task group of interested NIAC participants as described in Steps 1.3 and 1.4 of the process.

The introduction of this joint task group concept is intended to facilitate concurrent activities in each of the working committees and eliminate any untimely delays associated with the iterative "hand-off" of action items between those committees. Task group activities associated with systematic uniformity and the process thereof will be reviewed by the Service Request Coordination Team (SRCT), described in Recommendation #2.

In all other respects, task groups working ESP ONA requests should operate as typical NIAC issue focused task groups.

NOTE: While the concept of "joint" task groups is specific to the process of systematic uniformity and new to the NIAC process in general, its introduction in association with the systematic uniformity process provides an opportunity to examine its potential applicability to the resolution of other NIAC ONA issues as they arise.

IMPLEMENTATION OF THE SYSTEMATIC UNIFORMITY PROCESS

RECOMMENDATION #2

NIAC SERVICE REQUEST COORDINATION

The timely and efficient execution and monitoring of the systematic uniformity process will require the concerted and objective application of resources from both NIAC working committees and the NIIF. This is likely to require timely and efficient dialogues among the NIAC leadership.

These requirements can best be served by the designation of a Service Request Coordination Team responsible for the progress of all ESP ONA service requests through the systematic uniformity process. This tam should be responsible for the ongoing coordination, tracking, and monitoring of this process.

The Service Request Coordination Team should be made up of the two Co-Chairs of the NIIF and the Working Committee Co-Moderators. This group should provide both the necessary coordination within the NIAC organization and the NIAC management expertise and objectively needed to facilitate the activities associated with systematic uniformity.

The Service Request Coordination Team (SRCT) would be responsible for:

Coordination – The SRCT will act as coordinator between the NIIF, the two working committees and each task group to maintain a timely dialogue among those bodies with respect to systematic uniformity process issues.

Tracking – The SRCT will track the progress of all ESP ONA requests to ensure the timely and comprehensive completion of each step of the process.

Monitoring – The SRCT will monitor the overall effectiveness of the systematic uniformity process in handling a wide variety of ESP ONA request.

IMPLEMENTATION OF THE SYSTEMATIC UNIFORMITY PROCESS

RECOMMENDATION #3

PROCESS OF SERVICE REQUESTS THROUGH NIAC WORKING COMMITTEES

The progress of the work on an ESP service request, as noted on the overview dniifram of the Systematic Uniformity Process (page 6 of this document) is recommended to be as follows:

A service request may be initiated at any regular meeting of the NIAC or its subtending working committees.

The subsequent workflow on the service request would be as follows:

STEP ONE:	ESP Request Documentation
STEP TWO:	Description of Functionality
STEP THREE:	Technical Description
STEP FOUR:	Technical Feasibility

NIAC Consensus on fully documented service request

Readouts of the status of all active service requests at each step should be made as a part of regular Working Committee meetings.

* The original document for the Systematic Approach to Iniformity of ONA Services was written by the people listed below as members to the Information Industry Liaison Committee. Their original document has been updated and adapted to be used by the NIAC as a subcommittee of the NIIF.

ILIAC Task Force Members:

John Fence, NYNEX Service Company
Mark J. Golden, Association of Telemessaging Services International
Laurie Eide Ihle, US WEST
Carmen Marin, BellSouth Services
William P. McDonough, Southwestern Bell Telephone Company
Macke Raymond, Rochester Telephone
Lance Wilson, AT&T Bell Laboratories

Attachment D

Network Installation and Maintenance Committee (NIMC) Uniqueness

Network Installation and Maintenance Committee (NIMC) Committee Documentation Uniqueness

1. Issue Closure - When an Issue is closed from the NIMC, a Resolution Statement must be stated on the Issue Form. When the resolution pertains to any changes to stated references in the Operations Reference Document, the changes must be added, deleted or corrected within the Reference Document. The resolution statement should identify the placement of the changes within the Reference Document.

2. New Issues - As the Reference Document is a living document, whenever Standards are changed and the Reference Document requires such changes to be corrected, a new Issue is required to identify the changes and a resolution statement be generated.

   Any services and/or specifications that affects the telecommunication industry pertaining to interconnection / operations that are not identified in the Reference Document, should be introduced in the NIMC as a new Issue.

3. All NIMC issues should be logged and listed in numerical order, list title of the issue, date accepted, status of the issue, date of closure; date withdrawn; on hold, or no national agreements, etc.

Attachment E

Network Management Committee (NMC) Uniqueness

NETWORK MANAGEMENT COMMITTEE (NMC) COMMITTEE DOCUMENTATION UNIQUENESS

1. Issue Closure - When an Issue is closed from the NMC, a Resolution Statement must be stated on the Issue Form. When the resolution pertains to any changes to stated references in the Operations Reference Document, the changes must be added, deleted or corrected within the Reference Document. The resolution statement should identify the placement of the changes within the Reference Document.

2. New Issues - Whenever Standards are changed, requiring an update to the Reference Document, a new Issue must be generated. The new Issue must identify the required changes and contain a resolution statement.

   Any services and/or specifications that affects the telecommunication industry pertaining to interconnection / operations that are not identified in the Reference Document, should be introduced in the NMC as a new Issue.

3. All NMC issues should be logged and listed in numerical order, list title of the issue, date accepted, status of the issue, date of closure; date with-drawn; on hold, or no national agreements, etc.

Attachment F

Network Testing Committee (NTC) Uniqueness

NETWORK TESTING COMMITTEE

REFERENCE DOCUMENT

1. PURPOSE OF DOCUMENT

THE PURPOSE OF THIS DOCUMENT IS TO DEFINE THE EXPECTATIONS AND RESPONSIBILITIES ASSOCIATED WITH THE APPROPRIATE PARTIES RELATIVE TO THEIR PARTICIPATION IN NETWORK TESTING COMMITTEE AND TEST PHASES.

1.2 APPLICABILITY

This document is intended to be a living document, therefore subject to revision and upgrading under the Carrier Liaison Committee guidelines.

This document does not replace or supersede any existing Contracts, tariffs or any other legally binding document.

1.3 DEFINITIONS

For the purpose of this document the following definitions shall apply:

a. NTC; Network Testing Committee

b. NTC Participant;

An interested party, representing an Access Service Provider, Access Service Customer or Vendor/Manufacturer of telecommunications equipment.

c. Primary Participant;

The Primary Participant is an ASP or ASC who takes Primary responsibility for a portion of the test network representing an ASP or ASC's network. Primary Participants facilitate network interconnection testing using network elements which they may or may not supply. In the absence of an ASP/ASC, a Vendor/Manufacturer may elect to be a Primary Participant.

d. Secondary Participant;

The Secondary Participant provides to the Primary Participant(s) network element(s) for the ASP and/or ASC's network configuration. The network element(s) may be provided at the request of the Primary Participant or offered for consideration to the Network Testing Committee.

e. Contributing Participant;

A Contributing Participant is any party other than the Primary Participant or Secondary Participant who provides facilities, personnel, equipment, software and/or support (at their cost) at the Primary or Secondary Participant request.

f. Test Script Author;

Test Script Authors are those parties that have taken responsibility for the generation of the test scripts for application in the NTC phase under test.

g. Hub Provider;

The HUB Provider/Administrator provides technical, administrative support and data collection associated with physical interconnections through the testing HUB.

h. Overall Coordinator;

The Coordinator takes responsibility for the overall management of an entire NTC phase, including assignment of responsibilities to phase test participants and following up with these participants to ensure that those assigned responsibilities have been discharged.

1.4 DOCUMENT ORGANIZATION

The remainder of this document is organized into the following sections:

Section 2 - Basic Premises
Section 3 - Criteria
Section 4 - Network Testing Committee Operating Principles
Section 5 - Scope of Document
Section 6 - Mission of the Network Testing Committee
Section 7 - NTC Committee Participant Responsibilities
Section 8 - Primary Participant Responsibilities
Section 9 - Secondary Participant Responsibilities
Section 10 - Contributing Participant Responsibilities
Section 11 - Test Script Author Responsibilities
Section 12 - Hub Provider Responsibilities
Section 13 - Overall Coordinator Responsibilities
Section 14 - Co-Chair Responsibilities
Section 15 - Information Sharing Guidelines
Section 16 - Test Plan Timeline Template
Section 17 - Reports
Section 18 - Appendices

2. BASIC PREMISES

2.1 - Telecommunications Service Providers have an obligation to their collective customers to cooperatively provide assurance for the integrity of the Public Switched Telephone Network.

2.2 - Enhancing the integrity of our collective telecommunications network is the primary driving force behind the activities of the Network Testing Committee.

3. CRITERIA FOR INCLUSION IN THIS DOCUMENT

The information included in this document pertains to the operation and administration of the NTC and is a result of industry agreements.

4. NETWORK TESTING COMMITTEE OPERATING PRINCIPLES

4.1 - Provide a national mechanism for all service providers, Vendors and Manufacturers to jointly develop, approve and execute test scenarios in an off-line environment that will enhance the reliability, stability and survivability of the interconnected SS7 based networks.

4.2 - All reports and results of testing disseminated in accordance with the procedures documented here (see section 14) and in accordance with the Network Interconnection/Interoperability Forum Information Sharing Guidelines.

4.3 - All testing is performed in a cooperative and supportive atmosphere.

4.4 - Anomalies requiring referral to the appropriate standards body, or public forums for resolution would be via contribution through the NIIF.

4.5 - Resolutions to referred anomalies will be appended to the final report.

4.6 - All testing information/results are archived and made available to all industry participants and are subject to the Information Sharing Guidelines.

4.7 - The NTC can work efficiently and effectively only when representatives knowledgeable of the subject matter are in attendance. Therefore participants should be well prepared to discuss agenda topics and to speak authoritatively on behalf of their company.

4.8 - At the discretion of the testing parties, the NTC can be used as a forum for the presentation and discussion of test results.

4.9 - Once the test phase has been defined the overall coordinator shall assume responsibility for the implementation of the plan.

4.10 - Where contact between the NTC and a non-attending NTC participant is required, the appropriate industry Co-Chair shall be responsible for making that contact.

5. SCOPE OF DOCUMENT

The scope of this document includes the activities of the Network Testing Committee and the expectations of the participants in the testing phases of the NTC.

6. MISSION OF THE NTC

The Network Testing Committee provides the opportunity for participating service providers and vendors/manufacturers of telecommunications equipment to develop test scenarios and scripts, as well as perform tests in a controlled environment. The committee facilitates the exchange of information regarding the interoperability of networks and equipment (hardware/software) and specific applications towards maintaining the highest standards of network reliability and integrity.

7. NETWORK TESTING COMMITTEE PARTICIPANTS RESPONSIBILITIES

This section defines the responsibilities of the NT Committee participants.

7.1 - The Network Testing Committee members are responsible for:

- **a.** Identification of the testing focus for each test phase.
- **b.** Development of the Tests scripts for each phase of testing.
- **c.** Identifying the participants for each phase of testing under development.
- **d.** Determining the network configuration for the test phase under development.
- **e.** Identifying all of the nodes associated with the network configuration under development.
- **f.** Overall scheduling of the NTC Test Phases (see section 15).

7.2 - The NTC will agree by consensus on test cases which are to be executed for a given testing phase. Test cases selected for execution must be completely defined and sanctioned by the NTC prior to selection of participants for a given test phase.

7.3 - Letters of intent from the selected participants will be included in the testing document for the appropriate phase for which they are intended and handed over to the Overall Coordinator **(Appendix 1)**.

7.4 - The NT Committee shall receive volunteers for the Overall Coordinator role. The Overall Coordinator must be approved by the Primary and Secondary Participants.

7.5 The test scripts shall be reviewed and edited by the NT Committee as well as between the test script authors with testers that will be executing the test scripts.

7.6 - The NT Committee members shall assign a number to the test script in accordance with the methodology outlined and agreed upon (e.g., phase number and test script number).

7.7 - The NTC members shall identify the minimum criteria and test scripts to satisfy the Baseline test requirements

7.8 - NTC members may review anomalies identified in NTC Test Phase Final Reports and determine which, if any, of the identified anomalies should be tracked to their resolution by the NTC. For any and all such identified anomalies, the NTC shall select a date at which a status update is desired. In addition, they shall request that the Primary Participants provide this update to the Overall Coordinator in advance of the scheduled date. Discussion of the anomaly and its current status will be included in the agenda of the NTC meeting to be held on or after the requested date, if necessary. Following the review of any such update, the NTC may request and schedule a subsequent update.

8. PRIMARY PARTICIPANTS RESPONSIBILITIES

This section describes the responsibilities of the Primary Participants.

8.1 - The Primary Participant will provide a Letter of Intent in accordance with the NTC schedule, to the NT Committee to formalize their commitment to participate in the NTC test phase. The Letter of Intent should identify all resources that a given participant expects to provide for the test phase (see sect 18 appendix 1).

8.2 - A Primary participant's commitment must extend for the entire scope of a given testing phase, from the preliminary planning stages until the issuance of the final report.

8.3 - The Primary Participants will perform the tests by working with the other Primary Participants, Secondary Participants, Contributing Participants, Overall Coordinator, and HUB Administrator, as agreed upon by the NT Committee for the particular test phase that they have committed to participate in.

8.4 - At the beginning of the test program (i.e., Baseline) and thereafter prior to resumption of testing, each participant will inform all the other participants of the operating condition of its connected equipment.

8.5 - The Primary Participants will adhere to the NTC Information Sharing Guidelines (see section 14).

8.6 - The Primary Participant knowing the date of the NTC phase in which they wish to participate, will, PRIOR to delivering their Letter of Intent complete the following:

a. Secure commitments for their own test labs, facilities and personnel for the entire NTC test phase.

b. Identify a single point of contact including telephone number to represent and stand as a main communications channel for their network.

c. Secure commitments from Secondary and/or Contributing Participants relative to their support requirements which may include:

1. Equipment (e.g., Network Elements, Test Units, T1 facilities, etc.).

2. Personnel to support the equipment for test set up and during testing.

3. Personnel to participate in test execution, data collection and data analysis.

d. Ensure that all equipment and facilities, whether owned or supplied by secondary or contributing participants is capable of executing the tests for a given phase.

8.7 - Primary Participants, together with the Overall Coordinator, are responsible for determining what the process and responsibilities are for the analysis of the data prior to commencement of testing.

8.8 - The **Primary Participant** is responsible for:

a. Assuring that they are represented on all conference calls and/or meetings dealing with that NTC phase tests and environment. This includes their Secondary and Contributing Participants if so requested.

b. Working with other Primary Participants to determine data-fill details (e.g., point code assignments, routing numbers) to be used in the tests.

c. Setting up their testbed. This includes supplying their secondary participant(s) with the information needed to build and/or integrate their equipment into the ASP/ASC testbed.

d. Ordering, testing, and trouble shooting of facilities associated with the configuration setup for any facilities offered from their lab.

e. Executing the test scripts with the other Primary Participants, Secondary Participants, Overall Coordinator, Contributing Participants and HUB Provider/Administrator, either alone or with Vendor assistance.

f. Changing the order in which the test scripts are run where necessary based upon time, network availability and/or test equipment with the agreement of the Overall Coordinator and other Primary Participants.

g. Modifying the test scripts where necessary in order to meet the purpose of the test with the agreement of all participants.

h. Mutually determining, along with the other Primary Participants, Secondary Participants, Contributing Participants HUB Provider/Administrator and Overall Coordinator, the start and stop time of testing and any days or periods of time where testing will not be performed prior to the actual test where possible.

i. Coordinating data collection of their network node logs, message data, hard copies of datafill, and other necessary information required in the test scripts and/or required for data analysis, as it pertains to their network.

j. Performing detailed analysis of data generated within the Interconnected Network during and after the test phase.

k. Working with other Primary Participants and the Overall Coordinator to determine and document anomalies for their network node(s) and/or other network nodes as agreed upon in 8.7 above.

l. Resolving anomalies identified within their network or between their network and an adjoining network.

m. Obtaining vendor response/concurrence on any vendor related anomalies identified. When anomalies are determined to be associated with a vendor's product, the Primary Participant shall ensure that all data gathered pertinent to the anomaly is provided to the vendor to assist in its resolution. Anomalies identified during a test phase associated with a non-participating vendor/manufacturer's equipment/software shall be referred to the affected vendor/manufacturer via their respective NTC representative and in accordance with the NTC Information Sharing Guidelines (Section 14). When no NTC representative has been identified, any vendor related anomaly will be reported to the vendor through a trouble referral process that has been agreed upon by the Primary Participant and Vendor.

n. Working with the Vendor in resolving any Vendor related anomalies and/or developing and publishing a resolution action plan as defined in the NTC Information Sharing Guidelines.

o. Compiling and delivering a list of anomaly resolutions, for their ASP/ASC, to the overall coordinator.

p. Developing where necessary, issues and contributions to the NIIF for resolution of anomalies identified.

q. Pretesting equipment that will be needed to perform certain tests (if any) in the environment that will be used for the NTC test phase.

r. Preparing a Press Release that will be made available at the time that the Final Report is released to the industry. At a minimum, the Press Release should include the following information:

    1. Time Frames of Test Phase
    2. Quantity of Troubles Found
    3. Names of Participating Companies
    4. Significant Findings (e.g., critical, major, customer affecting)

Note: Attribution For Troubles Found Should "Not" be Included

8.9 - The Primary Participant is responsible for ensuring that when a Secondary Participant and Contributing Participant is being utilized their involvement is managed to meet the Primary Participant's needs.

8.10 - The Primary Participant shall keep a log of lessons learned during their participation in the testing phase.

8.11 - Primary Participants shall ensure that information shared with employees of their company is handled in accordance with the NTC and NIIF Information Sharing Guidelines. Except for employees of the primary participants having a need to know, no other person or entity should have access to the testing operations or should be permitted to participate in any way in the test program, including communications conducted between any of the participants, except as the affected participants have been given prior notification.

8.12 - The Primary Participant is responsible for retaining all test results associated with their network, such results should be archived in accordance with their companies guidelines for document retention, for a minimum of one (1) year or until all problems have been processed to the satisfaction of all participants.

8.13 - The Primary Participants should identify any additional requirements above and beyond those identified by the NTC for Baseline testing, taking into account the network under test and the test scripts to be applied.

8.14 - Primary participants shall, at the request of the NTC, provide status updates for anomalies which are deemed to be of particular interest. Updates will be provided to the Overall Coordinator on or before dates identified by the NTC.

9. SECONDARY PARTICIPANTS RESPONSIBILITIES

This section describes the responsibilities of the Secondary Participant.

9.1 - At the beginning of the test program (i.e., Baseline) and thereafter prior to resumption of testing, each participant will inform all the other parties of the operating condition of its connected equipment.

9.2 - The Secondary Participants knowing the dates and times of the NTC phase that they agreed to support will, prior to the start of that NTC Phase complete the following:

a. Secure all equipment to be used and populate it with the data received from the Primary Participant (e.g., switches data filled, T1 channels cross connected, test scripts built and applied to test boxes, etc.).

b. Pretesting of equipment that will be needed to perform certain tests (if any) in the environment that will be used for the NTC test phase.

c. Identify a single point of contact including telephone number to stand as a main communications channel for their role.

9.3 - Personnel, if they are requested to participate, will:

a. Have reviewed and be familiar with the test scripts;

b. Adhere to the NTC Information sharing Guidelines;

c. Attend all appropriate conference calls and/or meetings dealing with that NTC Phase tests and environment;

d. Participate in test execution and data analysis.

9.4 - The **Secondary Participant** will be responsible for:

a. The ordering, testing, and trouble shooting of facilities associated with the configuration setup for any facilities offered from their lab.

b. Mutually determining, along with the Primary Participants other Secondary Participants HUB Provider/Administrator and Overall Coordinator, the start and stop time of testing and any days or periods of time where testing will not be performed prior to the actual test where possible.

c. Executing test scripts with the other Secondary Participants, Overall Coordinator, Hub Provider/Administrator, and Primary Participants on behalf of the Primary Participant or with the Primary Participant who has requested these services, as directed by the Overall Coordinator.

d. Collecting any data necessary for analysis as required by the test scripts and Primary Participant, and forwarding the data to the Primary Participant.

e. Reviewing any anomalies given to them from the initial data analysis with the Primary Participant.

f. Resolving their anomalies (if any).

g. Responding in writing to the Primary Participant with the anomaly resolution, time frame for resolution and action plan and if applicable any reason for not being a resolved.

9.5 - The Secondary Participant and supporting organizations must be aware that they are under the responsibility of the designated Primary Participant.

9.6 - The Secondary Participant shall keep a log of lessons learned during their participation in the testing phase.

9.7 - Where equipment is being provided such equipment should be pretested in an environment that will be used for the NTC test phase.

9.8 - Secondary Participants shall ensure that information shared with employees of their company is handled in accordance with NTC and NIIF Information Sharing Guidelines. Except for employees of the participants having a need to know, no other person or entity should have access to the testing operations or should be permitted to participate in any way in the test program, including

communications conducted between any of the participants, except as the affected participants have been given prior notification.

9.9 - The Secondary Participant is responsible for retaining all test results associated with their network, such results should be archived in accordance with their companies guidelines for document retention, for a period of one (1) year or until all problems have been processed to the satisfaction of all participants.

9.10 - The Secondary Participants should identify any additional requirements above and beyond those identified by the NTC for Baseline testing, taking into account the network under test and the test scripts to be applied.

10. CONTRIBUTING PARTICIPANTS RESPONSIBILITIES

This section describes the responsibilities of a Contributing Participant.

10.1 - Active participation by a contributor personnel (excluding facility access) must be approved by all Primary and Secondary Participants, where not covered in a Letter of Intent.

10.2 - The Contributing Participant shall commit to provide personnel, facilities, equipment, software and/or support as requested by the Primary and/or Secondary Participant for the time required.

10.3 - The Contributing Participant shall identify a single point of contact including telephone number to stand as the main communications channel for their role.

10.4 - The Contributing Participant shall inform the NT Committee via a Letter of Intent when requesting participation by contributing personnel, equipment and/or support. The Letter of Intent should identify all resources that a given contributor may provide for the NTC test phase.

10.5 - Contributing Participants shall adhere to the Information Sharing Guidelines of the NTC, under the direction of the sponsoring Primary Participant(s).

> **10.5.1** - Where a contributing participant's equipment and or personnel are to be located at the hub or a lab other than one or more of the sponsoring Primary Participant's lab, the contributing participant shall request in writing permission to locate their equipment and/or personnel at the proposed location from the Primary Participant and the operator of the site where the equipment is to be located..
>
> **10.5.2** - The contributing participant will only connect their equipment under the direction of the Primary or Secondary Participant who they are representing.
>
> **10.5.3** - The contributing participant shall be bound by all restrictions applied by such lab(s) owner/operator(s) in addition to such restrictions under the NTC guidelines.

10.6 - Where equipment is being provided such equipment should be pretested in an environment that will be used for the NTC test phase.

10.7 - All test scripts that the Contributing Participant is involved with should be reviewed prior to commencement of the testing phase.