Wireless Number Portability Subcommittee
Inter-carrier Test Plan

8/21/01 ~~6/22/01~~

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SECTION 1

1.0 Introduction

The Wireless Inter Carrier Test Plan was developed using inputs from participating companies to test the Location Routing Number (LRN) solution for Wireless Local Number Portability (WLNP).

The Test Plan is written to evaluate the ability of Service Providers (SPs) to implement LNP. The focus of the Test Plan is to ensure conformance of individual, proprietary networks to industry LNP standards. As well as, the compatibility of those proprietary networks with each other in the LNP environment. This includes associated support systems, business arrangements, and interface agreements. The intent of the Test Plan is to ensure that the customer does not encounter any disruption or degradation of service when porting mobile directory numbers (MDN) from one service provider to another service provider.

The Test Plan contains a series of tests cases used to ensure that the porting of mobile directory numbers to or from a wireless service provider using the LRN solution will be successful. The Test Plan includes the porting of simulated live customers between Service Providers. This is accomplished by establishing test numbers and using existing or new porting processes. Using existing or newly established porting processes for testing will ensure that each Service Provider's internal processes and support systems will support LNP. This plan includes testing of porting between two wireless service providers as well as porting between Wireline and wireless service providers. Any potentially destructive tests should be performed in a lab or another internal environment and not performed between Service Providers.

1.0.1 Intra-Company Testing

Intra-company testing should utilize the internal environment specific to each Service Provider. The internal tests must be conducted with sufficient depth to ensure that the various elements are functioning properly before testing begins between Service Providers. The internal network testing environments will allow the simulation of anticipated inter-company situations as a means of avoiding failures when actual interconnection is achieved. Adherence to currently accepted network architectures and standards for processing calls in a non-ported environment must be retained in a portability environment. Company-specific intra-company testing should be completed prior to inter-company testing (see Section 1.0.2). Each company will confirm its completion of intra-company testing and its readiness to participate in inter-company testing by providing a written memo to their Test Coordinator.

Once the intra-company testing of affected nodes and network, and the certification testing with the Number Portability Administration Center (NPAC) is successfully completed, the Test Coordinator will schedule inter-company testing. Prior to initiating the inter-company testing, all intra-company testing must be completed by the individual Service Providers.

1.0.2 Inter-Company Testing

The inter-company testing will be organized according to the availability of the Service Provider participants and will be coordinated by their Test Coordinators. Each Service Provider will conduct a set of test scripts between itself and another service provider. Specific combinations of participants will be determined by the participants themselves, using the recommended list defined in Section 3. All selected tests should be satisfactorily completed before a Service Providers attempt to implement LNP. Participants may choose

to run additional tests developed by individual Service Provider combinations that address any specific needs, architectures or business arrangements of the testing partners. Service Providers participating in a particular geographic location will negotiate for test partners and test selections. Their Test Coordinators will manage this process by developing a master test schedule and track the testing done in each location by each Service Provider.

1.1 Scope and Purpose

This document defines Wireless Number Portability Sub Committee's (WNPSC) recommendations for inter-service provider LNP testing between wireless and wireless service providers, and wireless and Wireline service providers. These recommendations are limited to defining the testing recommended to validate the business processes and call completion between Service Providers. The testing and validating of an individual company's internal systems and processes is explicitly outside the scope of this document.

Vertical Services (we may need to revise based on GTT test cases)
There are vertical services that are impacted by the porting of numbers. This issue is not within the scope of this document. The responsibility for the testing of these services shall be addressed in the service level agreements made between individual service providers.
A "black box" testing approach will be used for inter-company testing. Black box testing implies that the tester is not concerned with what is inside the black box. Instead, the testing validates that the black box functions and interfaces with the outside world as specified. When applied to inter-company LNP testing, the black box approach means we will validate the interactions between SPs but not delve into the internal systems or processes of the SPs. Additionally, this test plan only addresses LNP functionality between SPs. Validation of processes that were in place prior to the implementation of LNP will only be addressed to the extent that they impact LNP or are impacted by LNP. Additionally, interactions between SPs and their vendors or third party network service providers are considered part of an SPs internal processes and are outside the scope of the inter-company test team. The test cases and validation points in this test plan are defined to address LNP systems and processes between Service Providers.
Service Provider Scope
This document addresses portability between wireless carriers and between Wireline and wireless carriers. Because the issues and processes for porting between wireless and Wireline carriers are significantly different than for porting between wireless carriers, this document will define them in separate sections as required.
While the focus of this test plan is on facility-based service providers, participation from resellers in testing is welcome. The participation of resellers may require the addition of new test cases or modification to existing test cases.
Third parties who provide network services for telecommunications providers are represented in this testing by the telecommunications SPs whom they support. This does not preclude third parties from participating in test planning sessions or in test execution, but the industry test team will not monitor or report on the performance of the third party directly. It is the responsibility of each telecommunications SP to get the appropriate support from any network service provider they require, to track and resolve any issues they have with their 3rd party providers. As an example, if a SP uses a third party network services provider's LNP database, and that database is not receiving porting updates, the testing team will look to the telecommunications SP to facilitate a resolution and inform the test team when the problem is resolved.

The concept of a service provider being responsible for their 3rd party services support extends to the relationship between the NPAC and SPs or other 3rd party LNP database providers. Testing of functionality between the NPAC and companies who get LNP data directly from the NPAC is facilitated by the NPAC and managed in a separate forum. Vendors of telecommunications equipment are specifically outside the scope of this test plan. The functioning of network elements is considered an internal issue for each company.

Business Function Scope: The following inter-service provider functions are impacted by LNP and are included in the test validations:

- Porting Order Exchange
- Service Provisioning
- Exception Processing – Order Cancellation
- Disconnected TN Snapback
- Call Flows
- 911 Call Back
- Operator Services
- Inter-Service Provider Billing

1.2 Assumptions

1. Service providers are responsible for testing their internal systems and processes prior to inter-company testing. Any problems identified during internal testing should be resolved prior to external testing. (Internal system's problems which can be overcome with workaround processes need not be resolved nor disclosed in order to participate in inter-company testing. However, companies should validate that any workaround process satisfies the external requirements.)
2. Production personnel will be used for testing all porting processes.
3. Prior to proceeding with the LNP capability verification the preliminary evaluation has been successfully completed on all participating nodes and equipment. This is done to ensure that nodes being placed in service have been manufactured and configured in compliance with recognized industry standards.
4. The interaction between the NPAC and LSMS must allow for the transfer of all routing information furnished and required for the EOs / MSCs to process and route calls in an LNP environment.
5. The interactions between Service Providers must allow for the transfer of all information via agreed upon communication channels, that is, passing the information required for directory numbers to be ported. Third party and other vendor support provided for a particular Service Provider should be transparent to the testing partner and is the responsibility of that Service Provider.
6. Basic billing structures are proprietary to each company.
7. Organizations must have internal processes capable of providing all administrative elements, the required data needed to port subscribers.
8. Wireline carriers will not participate in wireless to wireless testing.
9. Resellers are considered as another service provider. Any resellers who wish to participate in testing are welcome. It is not the responsibility of a facility-based service provider to ensure the participation of companies who resell their services.

10. The test conditions contained within this document are based on the NANC process flows. All carriers participating in inter-carrier testing should have access to the NANC process flows.
11. The Wireless Inter-carrier Test Plan does not include test cases specifically designed for multi-company testing
12. Test Coordinators are responsible for disconnecting their test accounts upon the completion of testing. It is recommended to bypass regular aging requirements in order to speed up testing.

2.0 Internal Testing Requirements

The purpose of the Requirements section is to provide network preparation guidelines for Service Providers. These requirements are designed to assist Service Providers and other interested parties involved in providing service to ported subscribers and in verifying compatibility with existing standards and are capable of processing LNP calls.
Testing of nodes and networks should be accomplished by individual Service Providers (SPs) on their own equipment, as their apparatus is installed into their working network. Testing in a risk free environment is recommended. All problems encountered during these conformance and interoperability tests should be corrected prior to testing with another SP.

2.0.1 Industry and Regulatory Requirements

The purpose of this section is to identify, and give a brief description, of the institutions, documents, and policies that have been established for LNP.

ATIS- ATIS provides uniformity in administrative and testing issues
ANSI requirements - ANSI provides the technical requirements accepted by the industry for telecommunications.
Local and National Regulatory requirements - This includes all requirements imposed by the governing bodies that define service requirements.
CTIA, other similar organizations and applicable wireless standards and requirements provide organizational direction and/or requirements.
NANC Wireless Wireline integration reports, NANC process flows- provide thorough discussion of integration issue.

2.1 Network Interconnections

Network Configurations Consideration

- Effect of launch point conflicts - Launch point conflicts can occur when a signaling node has more than one return route available from the node. An example is when a "full point code route" is directed by a cluster route.
- Gateway screening within various network - Screening in networks is used to provide security and customer control. If translations are not appropriate a STP may receive an unexpected point code and discard the message.
- Trunk screening tables should also be examined and translated to support NPA-NXX routing in an LNP environment.
- Each company should notify any third party vendors or system owners before entering into Inter-carrier testing.

SSP

- The SSP (Wireline EO, wireless MSC) must check for dialed number locally, or send a query via the STP for routing. The order of the sequencing is based upon an FCC ruling. This ability must also exist for the required call set up when ported numbers are encountered.
- Ability to assign appropriate Subsystem Numbers (SSN)
- Ability to respond with necessary announcement codes. - The SS7 environment has established the requirements for announcement codes and responses.
- Service and feature support should be tested for transparency to customer.

STP

- Must be capable of receiving all required messages and routing them to the proper network element, without any degradation to existing service.
- Must be capable of performing intermediate and final global title translations and routing correctly.
- Gateway screening is used in many networks as traffic control mechanism for the network. Screening tables if used must be modified as required to allow the proper routing of messages.

SCP

- Must be Capable of receiving and storing all LNP routing data.
- Must be capable of responding to all NPDB queries.
- Other network elements may perform these functions.

SOA /LSMS

- Prior to the implementation of LNP, Service Providers must either deploy or utilize a SOA, LSMS, Service Bureau or an internal solution.
- These systems facilitate the critical transaction flows to be exchanged between Service Providers and the NPAC SOA and master SMS database (NPAC/SMS).

2.2 Provisioning Guidelines for Information Exchange

The CTIA inter-carrier communications process (ICP), also known as the pre-port process, will be used to communicate a customer's request to port from one wireless service provider to another.

The ATIS Wireline ordering process, as defined by the Ordering and Provisioning committee of OBF, will be used to communicate a customer's request to port, when a wireless and Wireline carrier is involved.

Both processes include transmitting customer information from the New Service Provider (NSP) to the Old Service Provider (OSP) for validation. The OSP will be responsible for responding to the NSP, communicating the validation results (accept/deny). The NSP is responsible for communicating this response to the customer. However, differences exist within each process, such as port response intervals. For detailed background information, please refer to the NANC 2nd Wireless Wireline Integration report.

3.0 Test Planning

3.0.1 General

It is the intent that each company appoint a test coordinator who will be the single point of contact for initiation of inter-company testing. A company may have more than one point of contact for circumstances such as dividing up testing responsibilites by regions, having a primary and backup contact, or other situations. In addition, one or more test managers may be assigned to facilitate the actual execution of the test plans. Below are specific responsibilities for each position

3.0.2 Company Contacts

A testing coordinator(s) or point of contact(s) will be maintained by each carrier. Information regarding this position will be shared in Wireless Operations team meetings and the National Number Portability Operations (NNPO) meetings.

3.1 Test Setup

Each Service Provider will need to identify all of the communication/interface processes they will support and be prepared to test each one.
Also, each Service Provider Wireless and Wireline Company will identify a Company Coordinator(s). If a Service Provider does not provide this information or is unwilling to, then it will be assumed that they do not wish to engage in this test exercise.
The Coordinator(s) will be responsible for all LNP testing activities for their respective company. Testing will be coordinated on an MSA based level. This information along with names and contact telephone numbers should be made available to the WTSC co-chairs. .

This is for company to company LNP testing and does not include any NPAC certification activities or any third party vendors. Third party vendors will be the responsibility of those companies to which services are provided.
Resellers will be treated as Service Providers and all support activities / business arrangements should be transparent to their respective test partners.
The Test Coordinator is responsible for initiating and negotiating intercarrier testing. Some companies may choose to appoint one or more Test Managers to oversee the execution of the test plan. The following section details the responsibilities of each position.

Testing Coordinator

Responsibilities:

- A dedicated resource to interact with other companies for LNP test matters.
- This person should be the single point of contact (SPOC) for other companies when intercompany testing is desired.
- A SPOC for all activities of planning and scheduling of intercompany testing.

- In the event that there is no designated Test Manager, the Test Coordinator would assume both roles listed.

Attributes:

- This person should be knowledgeable of the Public Switching Network, the Wireless (Cellular and PCS) networks and the LNP technology, as it has been implemented in the Wireline networks, and proposed for Wireless networks. This includes the NPAC 'flows' and the relationship with the NPAC provider required in order to provide the provisioning feature of LNP.
- Excellent communication skills with peers, senior executives and customers.
- Must be flexible in dealing with all activities in the execution of the 'Test Plan'.
- Keeps a global focus on testing; sees the big picture.
- Previous experience in similar activities.

Test Manager

Responsibilities:

- Leads the Test Team in the execution of the 'Test Plan' by:

1. Organizing and chairing the company specific Test Team
2. Participating in the test selection process between test partners using past experience, the information furnished by the testing partners (vertical services, third party vendors, network architecture, special calling plans and any other consideration voiced by either partner).
3. Scheduling the testing activities via the Test Coordinator, by test partners.
4. Coordinating the actual testing by regular contact with their test partners. This includes, in the event of troubles, the decision to skip tests, reschedule tests, delete or modify tests, and any other activity to continue the flow of testing and to maintain a reasonable schedule.
5. Providing regular status reports as required.

Attributes:

- This person should be knowledgeable of the Public Switching Network, the Wireless (Cellular and PCS) networks and the LNP technology, as it has been implemented in the Wireline networks, and proposed for Wireless networks . This includes the NPAC 'flows' and the relationship with the NPAC provider required in order to provide the provisioning feature of LNP.
- This person should posses the technical skills to assist in identifying and assist resolving conflicts.

Information Exchange

Companies should complete a form (Appendix D) to be exchanged between the testing companies. This form will contain all contact names, telephone numbers for ordering, provisioning, maintenance (significance to be determined) and any other contacts to assist in facilitating the testing.

Communications Forum

Companies should agree upon a regularly scheduled forum to communicate progress and address any issues that may arise during testing. This may include face to face meetings, conference calls, or video conferencing.

Network Setup

The test network should be a subset of the actual network that will carry live LNP traffic. If nodes and switch types are included only for testing, it raises the obvious question about validity of the real network used for live LNP traffic. Therefore, all testing should be in the "live" network.

Test Matrix

Each company's Test Coordinator or Test Manager will need to identify which tests they will execute as part of the negotiations. As a basis, the test matrix is included in Appendix "A" of this document. This matrix is intended to include all tests. If a desired test is not listed here, the testing companies should develop it and include it in the Test Plan and Test Matrix.

3.2 Test Execution

Each company, after reviewing their test selections, will establish working numbers that will support those tests selected. The individual pairs of testing companies should cooperatively accomplish this. Test scheduling will dictate the total number of test numbers that will be required. Each test number should be established with a pseudo name, valid address, and should be included in all support systems. To initiate the test plan the customer (pseudo name) will request that a test number will be ported.

Any specific interface-business agreements should be included in the above process. In the absence of any, standard industry agreements should be the norm. This includes any timing / intervals along with accepted "business flows".

Logistics

The test partners should address the mechanics and processes for ordering / provisioning, contact numbers, billing concerns, etc.

The timelines for test execution shall be agreed to by the test partners prior to the commencement of testing.

Maintenance

Maintenance procedures will not be tested.

Trouble Resolution

Test partners should agree to the rules governing trouble resolution prior to the commencement of testing. It is recommended that any minor, quick fix problem be

resolved as they are encountered. All others should noted and that this test(s) should be suspended and concluded at an agreed to time after the problem has been resolved.

Test Results Document

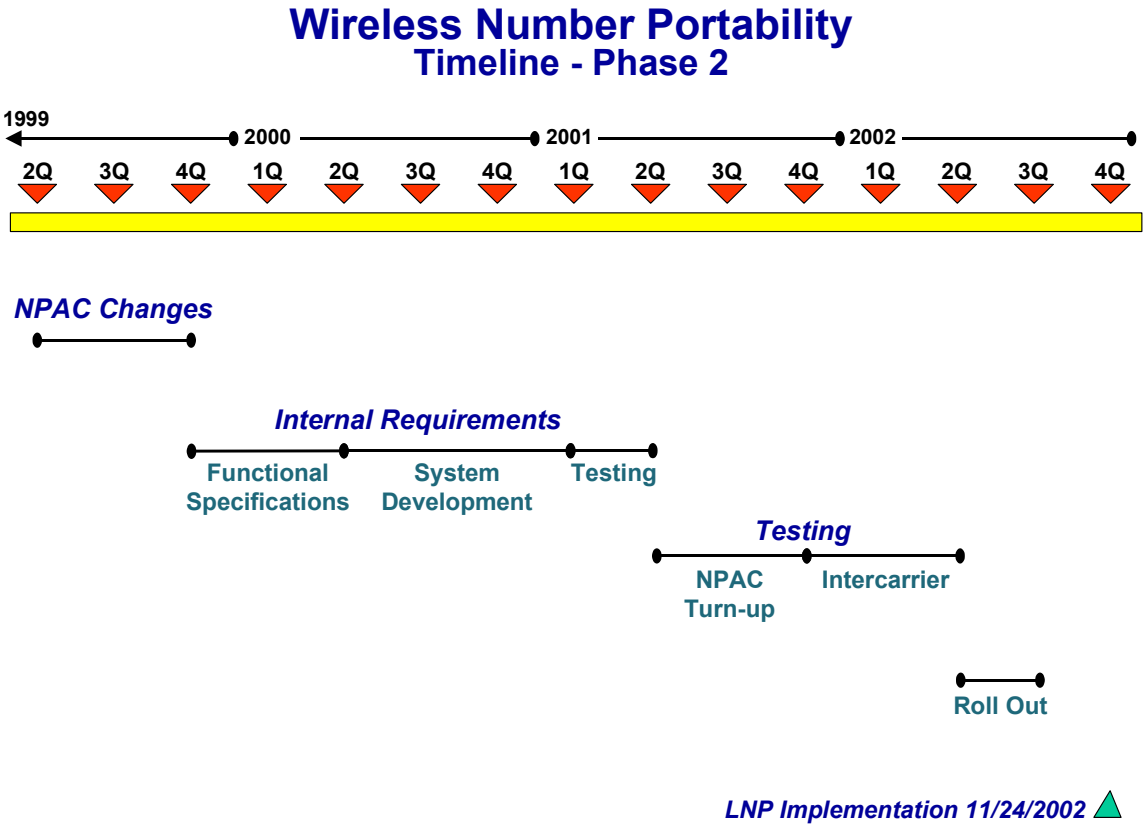
Each test partner should document all test results. Test results will be classified as follows:

1. Completed – Test results match the expected results.
2. Incomplete – Test results do not match expected results, or test not performed to the point of completion for any given reason.
3. Not performed – Both companies agree not to perform a selected test.

3.3 Establish Test Accounts

Each company shall be responsible for establishing test accounts prior to the start of inter-carrier testing. A list of the MDN's should be made available to all testing partners.

3.4 Timeline



SECTION 4
Basic Porting Processes

Basic Porting Processes Wireless and Wireline

The wireless to Wireline porting tests defined in this plan are based on porting within rate centers as per the FCC First Report and Order (FCC95-116). Wireless numbers must be ported to a Wireline rate center within the NPA-XXX. These test cases also assume inter-carrier communications are accomplished using the current LSR (Local Service Request) requirements for porting between wireless and Wireline carriers or the ICP (Intercarrier Communication Process) requirements for porting between two wireless carriers.

Wireless / Wireline and Wireless/ Wireless LNP Test Cases

Recommendations for testing to validate a wireless carrier's ability to deliver calls to TNs that have been ported between Wireline carriers are addressed in the Wireline LNP testing documents. Recommendations for testing to validate Wireline carriers ability to deliver calls to TNs which have been ported between wireless and Wireline carriers are covered in this section.

These test cases define validation of the interfaces between carriers. Companies who wish to perform additional internal validations will manage those validations internally.

These test cases assume a bilateral testing model. That is, a wireless company A and Wireline company B are testing with each other. Each pair of companies that chooses to test must negotiate the test cases and the plan to execute the test cases.

4.0 Interface and Provisioning Processes

(Service Provider – Service Provider Interfaces)

The test cases contained within this section test the communication processes between service providers, as well as the basic porting processes.

4.0.31 Conflict Resolution Process

Test Description:

This test case verifies the production personnel at the OLSP and the NLSP can demonstrate correct use of the NPAC conflict resolution process. This test models ONSP placing the port into conflict for a specified Reason Code (RCODE). This test simulates the conflict being resolved within six (6) hours.

~~Verify that the production personnel at the OSP and the NSP understand how to use the NPAC conflict resolution process. This test models OSP placing the port into conflict for an inappropriate due date however the conflict function can be used for other types of conflict. This is a first time conflict only conflict scenario and the conflict is initiated prior to noon the business day before the Due Date. This also simulates the conflict being resolved within six (6) hours.~~

Test Procedure:

1. NLSP sends OLSP a~~n *(~~port request~~)~~to port a TN.
2. OLSP sends NLSP an FOC/Port Response confirming the request~~, including the due date).~~
3. NNSP creates an NPAC subscription version (SV) for the port.
4. ONSP enters a concurrence flag of “No” and designates a conflict cause code.
5. NPAC changes subscription to Conflict Status and notifies both SPs.
6. NLSP contacts OLSP to resolve the conflict. If the conflict is resolved within six (6) business hours, the ONSP only notifies the NPAC of “conflict off”. (If test

scenario changes to conflict resolved after six (6) hours, either the ONSP or the NNSP can notify the NPAC of “conflict off”.)
7. NPAC notifies both SPs of conflict off, change in subscription version status.~~,~~ ~~via the interface (SOA or LTI).~~
8. The porting process resumes as normal and the port proceeds to completion
9. Document Test Results

Expected Results:

A. NLSP personnel contact the appropriate personnel at OLSP to resolve and have the conflict status removed from the subscription version.

B. OLSP personnel contact the appropriate personnel at ~~company B~~ NLSP and have the conflict status removed from the subscription version.

- The TN is activated on the new agreed to due date.

~~* port request to be defined in introduction~~

4.0.2 ~~———~~Cancel Order (Port in Progress) NSP Notified

Test Description:

- ~~Subscriber notifies NSP of desire to change carrier~~
- ~~NSP processes request to port number~~
- ~~Subscriber changes mind and cancels change order prior to activation only. (After activation a new port must occur.)~~

This test case verifies production personnel at the OLSP and NLSP can demonstrate how to cancel a port in progress. For this test the NLSP will submit a port request to the OLSP. Subsequently, this test simulates that the Subscriber notifies the NLSP of their decision to cancel the original port request. The NLSP demonstrates proper notification with the OLSP and the NPAC regarding the canceled port request. Both the NLSP and OLSP ensure original port request is cancelled.
NOTE: It is assumed that the ONSP does not send a matching create SV to the NPAC.

Test Procedure:

- ~~Subscriber notifies NSP of desire to port to a new carrier~~

1.NLSP sends OLSP a port request to port a TN.
2. OLSP sends NLSP Port Response confirming the request
3. NNSP creates an NPAC subscription version (SV) for the port.
4. Subscriber subsequently notifies NLSP to cancel port request
~~. NSP notifies OSP of request to cancel impending port prior to activation, via LSR/FOC or ICP.~~
5. NNSP sends a cancellation request to NPAC ~~via the interface, SOA or LTI~~

6. NPAC accepts and cancels porting request by changing subscription status to cancelled.
7. Both SPs are notified of cancellation via the interface
8. ONSP and NNSP return all translations and equipment to status prior to transaction request
9. Test to determine subscriber is fully functional – can receive incoming and make outgoing calls.
10. Document Test Results.

Expected Results:

- ~~TN is fully functional and a tested non-ported number~~
- ~~No trouble reports generated in switch~~
- ~~Proper billing records generated~~

A. Local service providers verify that the cancel has been processed successfully.

DELETE TEST CASE
~~Delete test case?~~

~~Test Description:~~

- ~~Subscriber notifies OSP of desire to change carrier~~
- ~~NSP processes request to port number~~
- ~~Subscriber changes mind and cancels change order prior to activation only. (After activation a new port must occur.)~~
- ~~The OSP has obtained authority from the end-user to act as the official agent to cancel port request~~
- ~~The OSP previously uploaded tot he NPAC during the subscription create~~

~~Test Procedure:~~

- ~~Subscriber notifies OSP of desire to port to a new carrier~~

- ~~OSP notifies NPAC and OSP of porting activity using provisioning process flow.~~

- ~~Subscriber subsequently notifies OSP to cancel port request~~
- ~~OSP notifies NSP of request to cancel impending port prior to activation, via LSR/FOC or ICP.~~
- ~~OSP sends a cancellation request NPAC via the interface, SOA or LTI~~
- ~~NPAC accepts and cancels porting request by changing subscription status to canceled.~~
- ~~Both SPs are notified of cancellation via the interface~~
- ~~OSP and NSP return all translations and equipment to status prior to transaction request~~
- ~~Test to determine subscriber is fully functional – can receive incoming and make outgoing calls.~~
- ~~Document Test Results.~~

~~Expected Results:~~

- ~~TN is fully functional and a tested non-ported number~~
- ~~No trouble reports generated in switch~~
- ~~Proper billing records generated~~

4.0.5 Disconnect Ported Subscribers Service

Test Description:

- A ported subscriber notifies service provider of desire to disconnect service
- Service provider issues disconnect order to NPAC
- OSP/LSP provide necessary translations changes for disconnected number
- Service disconnected

This test case verifies that the Current Network Service Provider can successfully disconnect a ported subscriber's service. A ported subscriber notifies service provider of desire to disconnect service. The Current Network Service provider issues a disconnect order to the NPAC. The NPAC demonstrates broadcast communication to all Service Providers. The Current and Incumbent providers demonstrate all translations have been finalized. Note: For the purposes of testing the standard aging period may need to be shortened.

Test Procedure:

1. Ported subscriber notifies current service provider of disconnect date & negotiates intercept treatment
2. Current network Sservice provide arranges intercept treatment (if applicable) and creates & processes service order
3 Current network Sservice provider notifies NPAC of disconnect date via the interface and indicates effective release date (defines when broadcast occurs.) Note: If no effective release date indicated, broadcast from NPAC is immediate.
4. On effective release date, NPAC notifies NPA-NXX (incumbent code) holder of the disconnected TN, effective release and disconnect dates via the SOA interface.
5. On effective release date, NPAC broadcasts subscription deletion to all applicable SPs via LSMS interface.
NPAC deletes TN from its active database on effective release date
6. Current network Sservice provider effects switch translations making ported TN a disconnected number, and places equipment and translations in a busy state provides appropriate number treatment.
    - Incumbent switch provider prepares translations in switch to identify the ported TN as a disconnected number, and places all translations in a busy state
7. Current network Sservice provider physically prepares Central Office and loop facilities to disconnect ported numbers (wireline only)
8. Current network Sservice provider coordinates disconnect (wireline only)
9. Current network Sservice provider removes switch translations (wireline only)
10. Incumbent switch provider code holder activates translations in switch that identify NPA-NXX-XXXX as a disconnected number puts TN back into numbers inventory allowing for re-assignment
11. Test Call NPA-NXX-XXXX for to confirm vacant number announcement
    - When completed testing has determined that NPA-NXX-XXXX is fully

~~disconnected all translations, removal is finalized~~

12. Document Test Results.

Expected Results:

- ~~NPA-NXX-XXXX is a disconnect number~~
- ~~No trouble reports generated in switch~~
- ~~NPA-NXX-XXXX is treated as a non working number at the ISP's switch~~

A. Verify that the TN is disconnected on the NPAC system.

B. B. On effective release date, the number is ~~removed from the NPAC, and~~ is returned to the ~~origional~~ code/block (as appropriate) holder after age~~e~~ing. ~~For the purposes of testing the standard ageing period may need to be shortened.~~

C. Verify call completes with proper announcements

D. Verify service provider and incumbent code holder made necessary translation changes.

4.0.64 Port Wireline TN to Wireless Carrier

Test Description:

This test case Vverifyies that a wireless company (NLSP) can successfully port a TN from a working Wwireline OLSP account to a wireless account.

Test Procedure:

- Wireline OSP, sets up account to be ported.

1. Wireless NLSP, sends LSR port request to port customers wireline service provider to port TNs.
2. Wireline OSPservice provider sends NLSP a port response confirming the request., validates LSR is correctly filled out.
3. The NNSP and (optionally) the OSP creates SVs in the NPAC.
4. The subscription version is activated on the due date by NNSP.
5. Document Test Results.

Expected Results:

A. Verify customer's wireless service TN is active, and can make calls and receive internetwork calls.

B. 911 Records processed as NENA standards dictate.

4.0.~~7~~5 Port Wireless TN to Wireline Carrier

Test Description:

This test case ~~V~~verif~~y~~ies that a wirel~~ess~~ine service provider ~~company B~~ can successfully port a TN from a ~~working~~ wireless ~~account to a Wireline account~~ OLSP.

Test Procedure:

1. Wireline ~~SP~~ service provider~~,~~ ~~company A~~ sends ~~LSR~~ port request to port ~~customer's service~~ TN.
2. Wireless OLSP~~, company B validates LSR is correctly filled out~~ sends provider a port response confirming the request.
3. The NNSP ~~and (optionally) the OSP~~ create~~s~~ SV~~s~~ in the NPAC.
4. The subscription version is activated on the due date by NNSP.
5. Document Test Results

Expected Results:

A. Verify ~~customer's wireless service~~ TN is active~~,~~ and can make calls and receive internetwork calls.

B. 911 Records processed as NENA standards dictate.

4.0.86 Port to Original

Test Description:

This Test Case verifies the service provider owning the donor switch for a ported number can return the number to the donor switch. ~~The key difference between porting to another switch and "Win Back" is that the NPAC porting record is deleted rather than updated with a new LRN.~~ In this test the NSP is the LERG assignee, and the TN is active at the OSP.

Test Procedure:

- ~~This test requires a TN ported from the LERG assigned switch for the code to another service provider. In this test the NSP is the LERG assignee, and the TN is in a ported status at the OSP.~~

1. The NLSP sends the OLSP ~~an LSR~~ port request requesting to port the ~~customer~~ TN.
2. The OLSP ~~validates LSR is correctly filled out~~ sends NLSP a port response confirming the request.
3. The NNSP ~~and (optionally) the OSP~~ creates SV~~s~~ in the NPAC.
4. The subscription version is activated on the due date by NNSP.
5. The NNSP verifies the customer's service is activated and that the port record has been removed from the NPAC.
6. Document Test Results

Expected Results:

A. The SV for the ported number is removed from the NPAC.

B. The NPAC will have a record of the TN listed as "old".

C. 911 Records processed as NENA standards dictate.

- ~~TN is working in the ISP's switch~~

D. Verify service is active and can make calls and receive internetworking calls

4.0.97 ~~Notification and validations of customer information for an incoming Single Line Port using WPR.~~ Port Request Validation (WLS – WLS)

Test Description:

Wireless customer initiates a single-line port. Wireless NLSP completes customer validation using Intercarrier Communications Process.

Test Procedure:

1. Wireless NLSP completes and transmits ~~WPR~~ port request to wireless OLSP
2. Wireless OLSP ~~receives and validates customer information and returns confirmation via WPR~~ returns a valid Port Response indicating that the port request has been confirmed (RT = C) .
3. Wireless NLSP receives confirmation from wireless OLSP via ~~WPR~~ port response.
4. Document test results

Expected Results:

A. The NLSP receives a Confirmed Port Response from the OLSP.

~~(outside the scope of test case)~~

4.0.~~108~~8 ~~Notification and validations of customer information for an incoming Single Line Port using WPR with reject.~~
Port Request Validation with Resolution Required. (WLS – WLS)

Test Description:

Wireless customer initiates a single-line port. This scenario depicts a due date and time conflict. Wireless NLSP resolves port date/time conflict with OLSP ~~and completes customer validation~~ using ~~WPR~~ Intercarrier Communications Process.

Test Procedure:

1. Wireless NLSP completes and transmits ~~WPR~~ port request to wireless OLSP
2. Wireless OLSP receives a port request and ~~validates customer information, but~~ rejects port date and time; ~~OSP returns rejected WPR~~
3. OLSP returns Port Response indicating that the port request has been rejected (RT=R) due to the port Due Date and Time (RCODE = 6E).
4. Wireless NLSP receives ~~rejected WPR~~port response and~~,~~ changes requested port date and time, and re-sends ~~WPR~~ port request to OLSP.
5. OLSP receives ~~WPR~~port request ~~, validates customer information and returns confirmation via WPR.~~ and returns a valid Port Response indicating that the port request has been confirmed (RT=C).
6. Document test results.

Expected Results:

~~(outside the scope of test case)~~

A. The NLSP receives a Confirmed Port Response from the OLSP after the date/time conflict has been resolved.

DELETE TEST CASE

~~4.0.11 Notification and validations of customer information for an outgoing Single Line Port using WPR.~~

~~Test Description:~~

~~Wireless customer initiates a single-line port. Wireless OSP receives WPR, completes customer validation, and returns confirmation.~~

~~Test Procedure:~~

- ~~Wireless NSP completes and transmits WPR to wireless OSP~~
- ~~Wireless OSP receives and validates customer information and returns confirmation via WPR.~~
- ~~Wireless NSP receives confirmation from wireless OSP via WPR.~~
- ~~Document test results~~

~~Expected Results:~~

~~(outside the scope of test case)~~

DELETE TEST CASE

~~4.0.12 Notification and validations of customer information for an outgoing Single Line Port using WPR with reject.~~

~~Test Description:~~

~~Wireless customer initiates a single-line port. Wireless OSP receives WPR and rejects it based on requested port date/time; date/time conflict is resolved and validation is completed; confirmation is returned to NSP.~~

~~Test Procedure:~~

- ~~Wireless NSP completes and transmits WPR to wireless OSP~~
- ~~Wireless OSP receives and validates customer information, but rejects port date and time; OSP returns rejected WPR~~
- ~~Wireless NSP receives rejected WPR, changes requested port date~~
- ~~and time, and re-sends WPR to OSP.~~
- ~~OSP receives WPR, validates customer information and returns~~
- ~~confirmation via WPR.~~
- ~~Document test results.~~

~~Expected Results:~~

~~(outside the scope of test case)~~

4.0.~~139~~ 139 ~~Notification and validations of customer information for a wireless Single Line Port-in using LSR / FOC.~~
Port Request Validation (WLN – WLS)

Test Description:

Wireline customer initiates a single-line port. Wireless NLSP ~~generates LSR/ EUI/NP forms and transmits to OSP; OSP validates and returns FOC.~~ completes customer validation using Intercarrier Communications Process.

Test Procedure:

1. Wireless NLSP completes and ~~faxes LSR/EU/NP forms~~ sends port request to Wireline ~~OSP~~ service provider
2. Wireline ~~OSP~~ service provider receives and validates customer information and returns confirmation via ~~FOC~~ port response.
3. Wireless NLSP receives confirmation from Wireline ~~OSP~~ service provider via ~~FOC~~ port response.
4. Document test results

Expected Results:

~~(outside the scope of test case)~~
A. The NLSP receives a Confirmation via a Port Response from the Wireline service provider.

4.0.~~14~~10 ~~Notification and validations of customer information for a wireless Single Line Port-in using LSR / FOC with reject.~~

Port Request Validation with Reject. (WLN – WLS)

Test Description:

Wireline customer initiates a single-line port. . This scenario depicts a due date and time conflict. ~~-~~Wireless NLSP ~~generates LSR/ EUI/NP forms and transmits to OSP; OSP rejects based on port date/time; NSP and OSP resolve difference; OSP returns FOC to NSP~~ resolves port date/time conflict with Wireline service provider using the Intercarrier Communications Process.~~-~~

Test Procedure:

1. Wireless NLSP completes ~~and faxes LSR/EUI/NP~~ and sends port request forms to Wireline ~~OSP~~service provider
2. Wireline service provider ~~OSP~~ receives port request forms and ~~validates customer information, but~~ rejects port date and time; ~~OSP~~ Wireline service provider returns ~~FOC~~ port response with a reject reason.
3. Wireless NLSP receives rejected ~~FOC~~ported response, changes requested port date
   - and time, and sends supplemental ~~LSP/EU/NP~~ port request forms to ~~OSP~~ wireline service provider.
4. ~~OSP~~ Wireline service provider receives ~~LSR/EU/NP~~ port request forms, validates ~~customer~~ information and
   - returns ~~FOC~~port response .
5. Wireless NLSP receives ~~FOC~~ port response from Wireline ~~OSP~~service provider.
6. Document test results.

Expected Results:

A. The NLSP receives Port Response from the Wireline service provider after the date/time conflict has been resolved

~~(outside the scope of test case)~~

DELETE TEST CASE

~~4.0.15 Notification and validations of customer information for a wireless Single Line Port-out using LSR / FOC.~~

~~Test Description:~~

~~Wireless customer initiates a single-line port. Wireline NSP completes LSR/ EUI/NP forms and transmits them to wireless OSP; wireless OSP validates and transmits FOC to NSP.~~

~~Test Procedure:~~

- ~~Wireline NSP completes and faxes LSR/EU/NP forms to wireless OSP~~
- ~~Wireless OSP receives and validates customer information and returns confirmation via FOC.~~
- ~~Wireline NSP receives confirmation from wireless OSP via FOC.~~
- ~~Document test results~~

~~Expected Results:~~

~~(outside the scope of test case)~~

DELETE TEST CASE

~~4.0.16 Notification and validations of customer information for an Wireless Single Line Port using LSR / FOC with reject.~~

~~Test Description:~~

~~Wireless customer initiates a single-line port. Wireline NSP generates LSR/ EUI/NP forms and transmits to wireless OSP; OSP rejects based on requested port date/time; NSP changes requested port date and time and re-transmits; OSP completes customer validation, generates and transmits FOC.~~

~~Test Procedure:~~

- ~~Wireline NSP completes and faxes LSR/EU/NP forms to wireless OSP~~
- ~~Wireless OSP receives and validates customer information, but rejects port date and time; OSP returns FOC with a reject reason.~~
- ~~Wireline NSP receives rejected FOC, changes requested port date~~
- ~~and time, and sends supplemental LSP/EU/NP forms to OSP.~~
- ~~OSP receives LSR/EU/NP forms, validates customer information and~~
- ~~returns FOC.~~
- ~~Wireline NSP receives FOC from wireless OSP.~~
- ~~Document test results.~~

~~Expected Results:~~

~~(outside the scope of test case)~~

4.0.117 Cancel Order ~~(Port in Progress)~~ Using ICP Supplemental Port Request (WLS-WLS)

Test Description:

- ~~Subscriber notifies NLSP of desire to change carrier~~
- ~~NLSP processes request to port number~~
- ~~Subscriber changes mind and cancels change order prior to SV creation at the NPAC.~~

This test case verifies OLSP and NLSP can successfully cancel a port in progress using a Supplemental port request. For this test the NLSP will submit a port request to the OLSP. Subsequently, this test simulates that the Subscriber notifies the NLSP of their decision to cancel the port request before either service provider has created a Subscription Version.

Test Procedure:

- ~~Subscriber notifies NLSP of desire to port to a new carrier~~

1. NLSP sends Port Request to OLSP initiating the pre-port process.
2. OLSP returns a valid Port Response indicating that the port request has been confirmed (RT=C)
3. Customer changes mind and requests that the port is to be cancelled. Assume that this occurs prior to the Subscription Version being created at the NPAC
4. NLSP generates a supplement port request (SUP Type 1) indicating that the request has been cancelled
5. OLSP sends back PortResponse RT=C confirming cancellation of port
6. OLSP and NLSP return all translations and equipment to status prior to transaction request

Expected Results:

A. Local service providers verify that the cancel has been processed successfully.

4.0.182 Modify Order to Delete TN (Port in Progress) Using ICP Supplemental Port Request (WLS-WLS)

Test Description:

Initial PortRequest is a multi-line port.
After initial request is made, customer decides to remove one of the lines from the request.
NLSP sends supplemental PortRequest of SUP type 3 to OLSP

- Port process continues

This test case assumes the SUP type 3 is submitted and resolved before either service provider has created a Subscription Version.

Test Procedure:

- Subscriber notifies NLSP of desire to port to a new carrier

1. NLSP sends Port Request to OLSP initiating the pre-port process. This request contains three LNUMs.
2. OLSP returns a valid Port Response indicating that the port request has been confirmed
3. Customer changes mind and requests that the TN from LNUM #2 is not to be ported. Assume this occurs before SVs have been created for the original request.
4. NLSP generates a supplement port request (SUP Type 3) indicating that the request has been modified. The Port Request only contains LNUM #1 and LNUM #3.
5. OLSP sends back Port Response confirming modification of port
6. NNSP creates SVs for TNs associated with LNUMs #1 and #3.
7. ONSP concurs SVs for LNUMs #1 and #3 only
8. NNSP activates SVs on Due Date

Expected Results:

A. Verify TNs in LNUMs #1 and #3 are fully functional in the ported environment active and can make and receive calls

B. Verify that no pending or active port result at NPAC for the TNs associated with LNUM #2 for the from above scenario.

4.0.139 Modify Customer Information (Port in Progress) Using ICP Supplemental Port Request (WLS-WLS)

Test Description:

This test case will exercise both the Resolution Required response type as well as the SUP Type 3 request case.
This test case assumes this is a single line port
Customer indicates to NLSP desire to port number
OLSP Ccannot verify customer data.
NLSP modifies the customer data using a SUP TYPE 3 request.

- Port process continues to completion

Test Procedure:

1. NLSP sends Port Request
2. OLSP cannot validate customer data info. OLSP sends a Port Response of typewith RT=R and RCODE=6C for LNUM in question.
3. NLSP modifies the customer information after confirming with the customer. NLSP uses a supplement Type 3 Port Request to do this.
4. OLSP confirms request by sending Port Response with RT=C.
5. NNSP creates SV
6. ONSP concurs SV
7. NNSP Activates SV

Expected Results:

A. Verify SV TN(s) areis active on the NPAC systemand can make calls and receive internetwork calls

4.0.1420 Modify Desired Due Date ~~(Port in Progress)~~ Using ICP Supplemental Port Request (WLS-WLS)

Test Description:

This test case will exercise both the Resolution Required response type as well as the SUP Type 2 request case.
Customer indicated to NLSP desire to port number
Desired Due Date is not accepted by OLSP.
NLSP modifies the original Due Date and Time using a SUP Type 2 request.
Port process continues to completion

Test Procedure:

1. NLSP sends Port Request with a desired due date and time 3 hours in the future
2. OLSP decides that the due date and time cannot be met and sends a Port Response of RT=R indicating that the due date and time cannot be met using RCODE=6F ~~for appropriate LNUM.~~
3. NLSP modifies the due date and time to be out 4 hours in advance after confirming with the customer. NLSP uses a SUP Type=2 Port Request to do this.
4. OLSP confirms new due date and time by sending Port Response with RT=C(confirm).
5. NNSP creates SV
6. ONSP concurs SV
7. NNSP Activates SV

Expected Results:

A. Verify ~~SV~~ TN(s) are ~~is~~ active ~~on the NPAC system~~ and can make calls and receive internetwork calls

4.0.~~21~~15
Use of Delay Response ~~(Port in Progress)~~ Using ICP Process (WLS-WLS)

Test Description:

This test case will exercise the Delay port response type.
Customer indicated to NLSP desire to port number
OLSP cannot confirm request within the 30 minutes and send delay response to the NLSP
OLSP sends confirmation of Port Request once the delay condition has been cleared
Port process continues to completion.

Test Procedure:

1. NLSP sends Port Request to OLSP indicating the customer wants to port the number
2. OLSP's back office systems are down and cannot validate customer information within the 30 minute interval and sends a Port Response of Type Delay (RT=D) with RCODE=6H for appropriate LNUM. The due date and time should be set to a value for which the OLSP feels they can send a valid response.
3. NLSP continues to wait for Port Response.
4. OLSP systems becomes available and confirms request by sending PortResponse with Response Type=confirm (RT=C).
5. NNSP creates SV
6. ONSP concurs SV
7. NNSP Activates SV

Expected Results:

A. Verify ~~SV~~ TN(s) are~~is~~ active ~~on the NPAC system~~ and can make and receive internetwork calls

4.1 WIRELESS / WIRELESS

Test cases contained within this section test call completion from a wireless phone, to a wireless phone, in a porting environment.

4.1.1 Local Ported Wireless Subscriber calling another Ported Wireless Subscriber with same NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a local call can be completed from a ported wireless number to another ported wireless number when both are subscribers of the same NETWORK PROVIDER and both are in the same LATA.

Test Procedure:

1. From a local ported wireless number
2. Call a local ported wireless number served by the same Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.1.2 ~~Local~~ Ported Wireless Subscriber calling Non-Ported Wireless Subscriber with same NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a ported wireless number to a non-ported wireless number when both are subscribers of the same NETWORK PROVIDER and in the same LATA.

Test Procedure:

1. From a ~~local~~ ported wireless number
2. Call a ~~local~~ non-ported wireless number served by the same Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to non-ported number
D. Expected switch billing records are created

4.1.3 ~~Local~~ Non-Ported Wireless Subscriber calling a Ported Wireless Subscriber with same NETWORK PROVIDER in the same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a non-ported wireless number to a ported wireless number when both are subscribers of the same NETWORK PROVIDER and both are in the same LATA.

Test Procedure:

1. From a ~~local~~ non-ported wireless number
2. Call a ~~local~~ ported wireless number served by the same Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.1.4 ~~Local~~ Non-Ported Wireless Subscriber calling another Non-Ported Wireless Subscriber with same NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a non-ported wireless number to another non-ported wireless number when both are subscribers of the same NETWORK PROVIDER and both are in the same LATA.

Test Procedure:

1. From a ~~local~~ non-ported wireless number
2. Call a ~~local~~ non-ported wireless number served by the same Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to non-ported number
D. Expected switch billing records are created

4.1.5 ~~Local~~ Ported Wireless Subscriber calling another Ported Wireless Subscriber with different NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a ported wireless number to another ported wireless number when each are subscribers of different NETWORK PROVIDERS and both are in the same LATA.

Test Procedure:

1. From a ~~local~~ ported wireless number
2. Call a ~~local~~ ported wireless number served by a different Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.1.6 ~~Local~~ Ported Wireless Subscriber calling Non-Ported Wireless Subscriber with different NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a ported wireless number to non-ported wireless number when each are subscribers of different NETWORK PROVIDERS and both are in the same LATA.

Test Procedure:

- From a ~~local~~ ported wireless number
- Call a ~~local~~ non-ported wireless number served by a different Network Provider in the same LATA
- Document Test Results

Expected Results:

- Switch performs NPDB query
- Switch routes call to destination
- Call completes to non-ported number
- Expected switch billing records are created

4.1.7 ~~Local~~ Non-Ported Wireless Subscriber calling a Ported Wireless Subscriber with different NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a non-ported wireless number to ported wireless number when each are subscribers of different NETWORK PROVIDERS and both are in the same LATA.

Test Procedure:

1. From a ~~local~~ non-ported wireless number
2. Call a ~~local~~ ported wireless number served by a different Network Provider in the same LATA
3/ Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.1.8 ~~Local~~ Non-Ported Wireless Subscriber calling a Non-Ported Wireless Subscriber with different NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a non-ported wireless number to non-ported wireless number when each are subscribers of different NETWORK PROVIDERS and both are in the same LATA.

Test Procedure:

1. From a ~~local~~ non-ported wireless number
2. Call a ~~local~~ non-ported wireless number served by a different Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to non-ported number
D. Expected switch billing records are created

4.1.9 ~~Local~~ Ported Wireless Subscriber calling another Wireless Ported Subscriber with same NETWORK PROVIDER in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a call routed over an IXC can be completed from a ported wireless number to another ported wireless number when both are subscribers of the same NETWORK PROVIDER and are in different LATA's, and on non-networked MSC's.

Test Procedure:

1. From a ~~local~~ ported wireless number
2. Call a ~~local~~ ported wireless number served by the same Network Provider in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.1.10 ~~Local~~ Ported Wireless Subscriber calling Non-Ported Wireless Subscriber with same NETWORK PROVIDER in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a call can be completed over an IXC from a ported wireless number to a non-ported wireless number when both are subscribers of the same NETWORK PROVIDER and are in different LATAs, and on non-networked MSC's.

Test Procedure:

1. From a ~~local~~ ported wireless number
2. Call a ~~local~~ non-ported wireless number served by the same Network Provider in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E.. Expected switch billing records are created

4.1.11 ~~Local~~ Non-Ported Wireless Subscriber calling a Ported Wireless Subscriber with same NETWORK PROVIDER in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a call can be completed over an IXC from a non-ported wireless number to a ported wireless number when both are subscribers of the same NETWORK PROVIDER and are in different LATAs, and on non-networked MSC's.

Test Procedure:

1. From a ~~local~~ non-ported wireless number
2. Call a ~~local~~ ported wireless number served by the same Network Provider in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.1.12 ~~Local~~ Non-Ported Wireless Subscriber calling another Non-Ported Wireless Subscriber with same NETWORK PROVIDER in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a call can be completed over an IXC from a non-ported wireless number to another non-ported wireless number when both are subscribers of the same NETWORK PROVIDER and are in different LATAs, and on non-networked MSC's.

Test Procedure:

1. From a ~~local~~ non-ported wireless number
2. Call a ~~local~~ non-ported wireless number served by the same Network Provider in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E. Expected switch billing records are created

4.1.13 ~~Local~~ Ported Wireless Subscriber calling another Ported Wireless Subscriber with different NETWORK PROVIDER in a different LATA. (SEE APPENDIX B DRAWING G)

Test Description:

This will validate that a call can be completed over an IXC from a ported wireless number to another ported wireless number when each are subscribers of different NETWORK PROVIDERS and are in different LATAs.

Test Procedure:

1. From a ~~local~~ ported wireless number
2. Call a ~~local~~ ported wireless number served by a different Network Provider in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.1.14 ~~Local~~ Ported Wireless Subscriber calling Non-Ported Wireless Subscriber with different NETWORK PROVIDER in a different LATA. (SEE APPENDIX B DRAWING G)

Test Description:

This will validate that a call can be completed over an IXC from a ported wireless number to non-ported wireless number when each are subscribers of different NETWORK PROVIDERS and are in different LATAs.

Test Procedure:

1. From a ~~local~~ ported wireless number
2. Call a ~~local~~ non-ported wireless number served by a different Network Provider in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E. Expected switch billing records are created

4.1.15 ~~Local~~ Non-Ported Wireless Subscriber calling a Ported Wireless Subscriber with different NETWORK PROVIDER in a different LATA. (SEE APPENDIX B DRAWING G)

Test Description:

This will validate that a call can be completed over an IXC from a non-ported wireless number to ported wireless number when each are subscribers of different NETWORK PROVIDERS and are in different LATAs.

Test Procedure:

1. From a ~~local~~ non-ported wireless number
2. Call a ~~local~~ ported wireless number served by a different Network Provider in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.1.16 ~~Local~~ Non-Ported Wireless Subscriber calling a Non-Ported Wireless Subscriber with different NETWORK PROVIDER in a different LATA. (SEE APPENDIX B DRAWING G)

Test Description:

This will validate that a call can be completed over an IXC from a non-ported wireless number to non-ported wireless number when each are subscribers of different NETWORK PROVIDERS and are in different LATAs.

Test Procedure:

1. From a ~~local~~ non-ported wireless number
2. Call a ~~local~~ non-ported wireless number served by a different Network Provider in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E. Expected switch billing records are created

4.1.17 Roaming Ported Wireless Subscriber calling another Ported Wireless Subscriber with same NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a roaming call can be completed from a ported wireless number to another ported wireless number when both are subscribers of the same NETWORK PROVIDER and both are in the same LATA.

Test Procedure:

1. From a ported wireless number that is roaming
2. Call a ~~local~~ ported wireless number served by the same Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.1.18 Roaming Ported Wireless Subscriber calling Non-Ported Wireless Subscriber with same NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a roaming call can be completed from a ported wireless number to a non-ported wireless number when both are subscribers of the same NETWORK PROVIDER and in the same LATA.

Test Procedure:

1. From a ported wireless number that is roaming
2. Call a ~~local~~ non-ported wireless number served by the same Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.1.19 Roaming Non-Ported Wireless Subscriber calling a Ported Wireless Subscriber with same NETWORK PROVIDER in the same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a roaming call can be completed from a non-ported wireless number to a ported wireless number when both are subscribers of the same NETWORK PROVIDER and both are in the same LATA.

Test Procedure:

1. From a non-ported wireless number that is roaming
2. Call a ~~local~~ ported wireless number served by the same Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.1.20 Roaming Non-Ported Wireless Subscriber calling another Non-Ported Wireless Subscriber with same NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a roaming call can be completed from a non-ported wireless number to another non-ported wireless number when both are subscribers of the same NETWORK PROVIDER and both are in the same LATA.

Test Procedure:

1. From a non-ported wireless number that is roaming
2. Call a ~~local~~ non-ported wireless number served by the same Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.1.21 Roaming Ported Wireless Subscriber calling another Ported Wireless Subscriber with different NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING B)

Test Description:

This will validate that a roaming call can be completed from a ported wireless number to another ported wireless number when each are subscribers of different NETWORK PROVIDERS and both are in the same LATA.

Test Procedure:

1. From a ported wireless number that is roaming
2. Call a ~~local~~ ported wireless number served by a different Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.1.22 Roaming Ported Wireless Subscriber calling Non-Ported Wireless Subscriber with different NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING B)

Test Description:

This will validate that a roaming call can be completed from a ported wireless number to non-ported wireless number when each are subscribers of different NETWORK PROVIDERS and both are in the same LATA.

Test Procedure:

1. From a ported wireless number that is roaming
2. Call a ~~local~~ non-ported wireless number served by a different Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to non-ported number
D. Expected switch billing records are created

4.1.23 Roaming Non-Ported Wireless Subscriber calling a Ported Wireless Subscriber with different NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING B)

Test Description:

This will validate that a roaming call can be completed from a non-ported wireless number to ported wireless number when each are subscribers of different NETWORK PROVIDERS and both are in the same LATA.

Test Procedure:

1. From a non-ported wireless number that is roaming
2. Call a ~~local~~ ported wireless number served by a different Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.1.24 Roaming Non-Ported Wireless Subscriber calling a Non-Ported Wireless Subscriber with different NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING B)

Test Description:

This will validate that a roaming call can be completed from a non-ported wireless number to non-ported wireless number when each are subscribers of different NETWORK PROVIDERS and both are in the same LATA.

Test Procedure:

1. From a non-ported wireless number that is roaming
2. Call a ~~local~~ non-ported wireless number served by a different Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to non-ported number
D. Expected switch billing records are created

4.1.25 Roaming Ported Wireless Subscriber calling another Ported Wireless Subscriber with same NETWORK PROVIDER in their home LATA. (SEE APPENDIX B DRAWING C)

Test Description:

This will validate that a roaming call can be completed over an IXC from a ported wireless number to another ported wireless number when both are subscribers of the same NETWORK PROVIDER and are in different LATAs.

Test Procedure:

1. From a ported wireless number that is roaming
2. Call a ~~local~~ ported wireless number served by the same Network Provider in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.1.26 Roaming Ported Wireless Subscriber calling Non-Ported Wireless Subscriber with same NETWORK PROVIDER in their home LATA. (SEE APPENDIX B DRAWING C)

Test Description:

This will validate that a roaming call can be completed over an IXC from a ported wireless number to a non-ported wireless number when both are subscribers of the same NETWORK PROVIDER and are in different LATAs.

Test Procedure:

1. From a ported wireless number that is roaming
2. Call a ~~local~~ non-ported wireless number served by the same Network Provider in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E. Expected switch billing records are created

4.1.27 Roaming Non-Ported Wireless Subscriber calling a Ported Wireless Subscriber with same NETWORK PROVIDER in their home LATA. (SEE APPENDIX B DRAWING C)

Test Description:

This will validate that a roaming call can be completed over an IXC from a non-ported wireless number to a ported wireless number when both are subscribers of the same NETWORK PROVIDER and are in different LATAs.

Test Procedure:

1. From a non-ported wireless number that is roaming
2. Call a ~~local~~ ported wireless number served by the same Network Provider in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.1.28 Roaming Non-Ported Wireless Subscriber calling another Non-Ported Wireless Subscriber with same NETWORK PROVIDER in their home LATA. (SEE APPENDIX B DRAWING C)

Test Description:

This will validate that a roaming call can be completed over an IXC from a non-ported wireless number to another non-ported wireless number when both are subscribers of the same NETWORK PROVIDER and are in different LATAs.

Test Procedure:

1. From a non-ported wireless number that is roaming
2. Call a ~~local~~ non-ported wireless number served by the same Network Provider in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E. Expected switch billing records are created

4.1.29 Roaming Ported Wireless Subscriber calling another Ported Wireless Subscriber with different NETWORK PROVIDER in their home LATA. (SEE APPENDIX B DRAWING D)

Test Description:

This will validate that a roaming call can be completed over an IXC from a ported wireless number to another ported wireless number when each are subscribers of different NETWORK PROVIDERS and are in different LATAs.

Test Procedure:

1. From a ported wireless number that is roaming
2. Call a ~~local~~ ported wireless number served by a different Network Provider in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.1.30 Roaming Ported Wireless Subscriber calling Non-Ported Wireless Subscriber with different NETWORK PROVIDER in their home LATA. (SEE APPENDIX B DRAWING D)

Test Description:

This will validate that a roaming call can be completed over an IXC from a ported wireless number to non-ported wireless number when each are subscribers of different NETWORK PROVIDERS and are in different LATAs.

Test Procedure:

1. From a ported wireless number that is roaming
2. Call a ~~local~~ non-ported wireless number served by a different Network Provider in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E. Expected switch billing records are created

4.1.31 Roaming Non-Ported Wireless Subscriber calling a Ported Wireless Subscriber with different NETWORK PROVIDER in their home LATA. (SEE APPENDIX B DRAWING D)

Test Description:

This will validate that a roaming call can be completed over an IXC from a non-ported wireless number to ported wireless number when each are subscribers of different NETWORK PROVIDERS and are in different LATAs.

Test Procedure:

1. From a non-ported wireless number that is roaming
2. Call a ~~local~~ ported wireless number served by a different Network Provider in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.1.32 Roaming Non-Ported Wireless Subscriber calling a Non-Ported Wireless Subscriber with different NETWORK PROVIDER in their home LATA. (SEE APPENDIX B DRAWING D)

Test Description:

This will validate that a roaming call can be completed over an IXC from a non-ported wireless number to non-ported wireless number when each are subscribers of different NETWORK PROVIDERS and are in different LATAs.

Test Procedure:

1. From a non-ported wireless number that is roaming
2. Call a ~~local~~ non-ported wireless number served by a different Network Provider in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E. Expected switch billing records are created

4.1.33 Roaming Non Ported Wireless Subscriber calling a Roaming Ported Wireless Subscriber with same NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a roaming call can be completed from a non ported wireless number to a roaming ported wireless number when both are subscribers of the same NETWORK PROVIDER and both are in the same LATA.

Test Procedure:

1. ____From a non ported wireless number that is roaming
2. ____Call a roaming ported wireless number served by the same Network Provider in the same LATA
3. ____Document Test Results

Expected Results:

A. ____Switch performs NP database dip
B. ____Call completes to ported number
C. ____Expected switch billing records are created

4.1.34 Roaming Ported Wireless Subscriber calling a Roaming Ported Wireless Subscriber with same NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a roaming call can be completed from a ported wireless number to a roaming ported wireless number when both are subscribers of the same NETWORK PROVIDER and both are in the same LATA.

Test Procedure:

1. From a ported wireless number that is roaming
2. Call a roaming ported wireless number served by the same Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NP database dip
B. Call completes to ported number
C. Expected switch billing records are created

4.1.35 Roaming Non Ported Wireless Subscriber calling a Roaming Non Ported Wireless Subscriber with same NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a roaming call can be completed from a non ported wireless number to a roaming non ported wireless number when both are subscribers of the same NETWORK PROVIDER and both are in the same LATA.

Test Procedure:

1. From a non ported wireless number that is roaming
2. Call a roaming non ported wireless number served by the same Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NP database dip
B. Call completes to ported number
C. Expected switch billing records are created

4.1.36 Roaming Ported Wireless Subscriber calling a Non Ported Wireless Subscriber with same NETWORK PROVIDER in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a roaming call can be completed from a ported wireless number to a non ported wireless number when both are subscribers of the same NETWORK PROVIDER and both are in the same LATA.

Test Procedure:

1. From a ported wireless number that is roaming
2. Call a non ported wireless number served by the same Network Provider in the same LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call
B. Switch performs LRN database dip
C. Switch routes call to destination
D. Call completes to ported number
E. Expected switch billing records are created

4.2 WIRELESS / WIRELINE

Test cases contained within this section test call completion from a wireless phone, to a Wireline phone, in a porting environment.

4.2.1 ~~Local~~ Ported Wireless Subscriber calling Ported Wireline Subscriber in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a ported wireless number to a ported Wireline number when both are in the same LATA.

Test Procedure:

1. From a ~~local~~ ported wireless number
2. Call a ~~local~~ ported Wireline number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.2.2 ~~Local~~ Ported Wireless Subscriber calling Wireline Non-Ported Subscriber in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a ported wireless number to a non-ported Wireline number when both are in the same LATA.

Test Procedure:

1. From a ~~local~~ ported wireless number
2. Call a ~~local~~ non-ported Wireline number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to non-ported number
D. Expected switch billing records are created

4.2.3 ~~Local~~ Non-Ported Wireless Subscriber calling a Ported Wireline Subscriber in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a non-ported wireless number to a ported Wireline number when both are in the same LATA.

Test Procedure:

1. From a ~~local~~ non-ported wireless number
2. Call a ~~local~~ ported Wireline number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.2.4 ~~Local~~ Non-Ported Wireless Subscriber calling a Non-Ported Wireline Subscriber in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a non-ported wireless number to a non-ported Wireline number when both are in the same LATA.

Test Procedure:

1. From a ~~local~~ non-ported wireless number
2. Call a ~~local~~ non-ported Wireline number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to non-ported number
D. Expected switch billing records are created

4.2.5 ~~Local~~ Ported Wireless Subscriber calling Ported Wireline Subscriber in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a call can be completed over an IXC from a ported wireless number to a ported Wireline number when the second subscriber is in a different LATA than the originator of the call.

Test Procedure:

1. From a ~~local~~ ported wireless number
2. Call a ~~local~~ ported Wireline number in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.2.6 ~~Local~~ Ported Wireless Subscriber calling Wireline Non-Ported Subscriber in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a call can be completed over an IXC from a ported wireless number to a non-ported Wireline number when the second subscriber is in a different LATA than the originator of the call.

Test Procedure:

1. From a ~~local~~ ported wireless number
2. Call a ~~local~~ non-ported Wireline number in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E. Expected switch billing records are created

4.2.7 ~~Local~~ Non-Ported Wireless Subscriber calling a Ported Wireline Subscriber in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a call can be completed over an IXC from a non-ported wireless number to a ported Wireline number when the second subscriber is in a different LATA than the originator of the call.

Test Procedure:

1. From a ~~local~~ non-ported wireless number
2. Call a ~~local~~ ported Wireline number in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.2.8 ~~Local~~ Non-Ported Wireless Subscriber calling a Non-Ported Wireline Subscriber in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a call can be completed over an IXC from a non-ported wireless number to a non-ported Wireline number when the second subscriber is in a different LATA than the originator of the call.

Test Procedure:

1. From a ~~local~~ non-ported wireless number
2. Call a ~~local~~ non-ported Wireline number in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E. Expected switch billing records are created

4.2.9 Roaming Ported Wireless Subscriber calling Ported Wireline Subscriber in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a roaming call can be completed from a ported wireless number to a ported Wireline number when both are in the same LATA.

Test Procedure:

1. From a ported wireless number that is roaming
2. Call a ~~local~~ ported Wireline number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.2.10 Roaming Ported Wireless Subscriber calling Wireline Non-Ported Subscriber in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a roaming call can be completed from a ported wireless number to a non-ported Wireline number when both are in the same LATA.

Test Procedure:

1. From a ported wireless number that is roaming
2. Call a ~~local~~ non-ported Wireline number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to non-ported number
D. Expected switch billing records are created

4.2.11 Roaming Non-Ported Wireless Subscriber calling a Ported Wireline Subscriber in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a roaming call can be completed from a non-ported wireless number to a ported Wireline number when both are in the same LATA.

Test Procedure:

1. From a non-ported wireless number that is roaming
2. Call a ~~local~~ ported Wireline number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.2.12 Roaming Non-Ported Wireless Subscriber calling a Non-Ported Wireline Subscriber in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a roaming call can be completed from a non-ported wireless number to a non-ported Wireline number when both are in the same LATA.

Test Procedure:

1. From a non-ported wireless number that is roaming
2. Call a ~~local~~ non-ported Wireline number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to non-ported number
D. Expected switch billing records are created

4.2.13 Roaming Ported Wireless Subscriber calling Ported Wireline Subscriber in the roamer's home LATA. (SEE APPENDIX B DRAWING C)

Test Description:

This will validate that a roaming call can be completed over an IXC from a ported wireless number to a ported Wireline number when the second subscriber is in the roamer's home LATA.

Test Procedure:

1. From a ported wireless number that is roaming
2. Call a ~~local~~ ported Wireline number in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.2.14 Roaming Ported Wireless Subscriber calling Wireline Non-Ported Subscriber in their home LATA. (SEE APPENDIX B DRAWING C)

Test Description:

This will validate that a roaming call can be completed over an IXC from a ported wireless number to a non-ported Wireline number when the second subscriber is in their home LATA.

Test Procedure:

1. From a ported wireless number that is roaming
2. Call a ~~local~~ non-ported Wireline number in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E. Expected switch billing records are created

4.2.15 Roaming Non-Ported Wireless Subscriber calling a Ported Wireline Subscriber in their home LATA. (SEE APPENDIX B DRAWING C)

Test Description:

This will validate that a roaming call can be completed over an IXC from a non-ported wireless number to a ported Wireline number when the second subscriber is in their home LATA.

Test Procedure:

1. From a non-ported wireless number that is roaming
2. Call a ~~local~~ ported Wireline number in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.2.16 Roaming Non-Ported Wireless Subscriber calling a Non-Ported Wireline Subscriber in their home LATA. (SEE APPENDIX B DRAWING C)

Test Description:

This will validate that a roaming call can be completed over an IXC from a non-ported wireless number to a non-ported Wireline number when the second subscriber is in their home LATA.

Test Procedure:

1. From a non-ported wireless number that is roaming
2. Call a ~~local~~ non-ported Wireline number in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E. Expected switch billing records are created

4.3 WIRELINE / WIRELESS

Test cases contained within this section test call completion from a Wireline phone, to a wireless phone, in a porting environment.

4.3.1 Ported Wireline Subscriber calling ~~Local~~ Ported Wireless Subscriber in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a ported number to a ported wireless number when both are in the same LATA.

Test Procedure:

1. From a ~~local~~ ported Wireline number
2. Call a ~~local~~ ported wireless number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.3.2 ~~Local~~ Ported Wireline Subscriber calling Wireless Non-Ported Subscriber in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a ported Wireline number to a non-ported wireless number when both are in the same LATA.

Test Procedure:

1. From a ~~local~~ ported Wireline number
2. Call a ~~local~~ non-ported wireless number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to non-ported number
D. Expected switch billing records are created

4.3.3 ~~Local~~ Non-Ported Wireline Subscriber calling a Ported Wireless Subscriber in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a non-ported Wireline number to a ported wireless number when both are in the same LATA.

Test Procedure:

1. ____From a ~~local~~ non-ported Wireline number
2. ____Call a ~~local~~ ported wireless number in the same LATA
3. ____Document Test Results

Expected Results:

A. ____Switch performs NPDB query
B. ____Switch routes call to destination
C. ____Call completes to ported number
D. ____Expected switch billing records are created

4.3.4 ~~Local~~ Non-Ported Wireline Subscriber calling a Non-Ported Wireless Subscriber in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a ~~local~~ call can be completed from a non-ported Wireline number to a non-ported wireless number when both are in the same LATA.

Test Procedure:

1. From a ~~local~~ non-ported wireless number
2. Call a ~~local~~ non-ported Wireline number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to non-ported number
D. Expected switch billing records are created

4.3.5 ~~Local~~ Ported Wireline Subscriber calling Ported Wireless Subscriber in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a call can be completed over an IXC from a ported Wireline number to a ported wireless number when the second subscriber is in a different LATA than the originator of the call.

Test Procedure:

1. From a ~~local~~ ported Wireline number
2. Call a ~~local~~ ported wireless number in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.3.6 ~~Local~~ Ported Wireline Subscriber calling Wireless Non-Ported Subscriber in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a call can be completed over an IXC from a ported Wireline number to a non-ported wireless number when the second subscriber is in a different LATA than the originator of the call.

Test Procedure:

1. ____From a ~~local~~ ported Wireline number
2. ____Call a ~~local~~ non-ported wireless number in a different LATA
3. ____Document Test Results

Expected Results:

A. ____Originating Switch routes call to N-1 carrier
B. ____N-1 carrier performs NPDB query
C. ____N-1 carrier routes call to terminating network
D. ____Terminating network completes call to Non-ported number
E. ____Expected switch billing records are created

4.3.7 ~~Local~~ Non-Ported Wireline Subscriber calling a Ported Wireless Subscriber in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a call can be completed over an IXC from a non-ported Wireline number to a ported wireless number when the second subscriber is in a different LATA than the originator of the call.

Test Procedure:

1. From a ~~local~~ non-ported Wireline number
2. Call a ~~local~~ ported wireless number in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.3.8 ~~Local~~ Non-Ported Wireline Subscriber calling a Non-Ported Wireless Subscriber in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a call can be completed over an IXC from a non-ported Wireline number to a non-ported wireless number when the second subscriber is in a different LATA than the originator of the call.

Test Procedure:

1. From a ~~local~~ non-ported Wireline number
2. Call a ~~local~~ non-ported wireless number in a different LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E. Expected switch billing records are created

4.3.9 ~~Roaming~~ Ported Wireline Subscriber calling Roaming ~~P~~ported Wireless Subscriber in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a ~~roaming~~ call can be completed from a ported Wireline number to a roaming ported wireless number when both are in the same LATA.

Test Procedure:

1. From a ported Wireline number ~~that is roaming~~
2. Call a ~~local~~ roaming ported wireless number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.3.10 ~~Roaming~~ Ported Wireline Subscriber calling Roaming Wireless Non-Ported Subscriber in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a ~~roaming~~ call can be completed from a ported Wireline number to a roaming non-ported wireless number when both are in the same LATA.

Test Procedure:

1. From a ported Wireline number ~~that is roaming~~
2. Call a ~~local~~ roaming non-ported wireless number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to non-ported number
D. Expected switch billing records are created

4.3.11 ~~Roaming~~ Non-Ported Wireline Subscriber calling a Roaming Ported Wireless Subscriber in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a ~~roaming~~ call can be completed from a non-ported Wireline number to a roaming ported wireless number when both are in the same LATA.

Test Procedure:

1. From a non-ported Wireline number ~~that is roaming~~
2. Call a ~~local~~ roaming ported wireless number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to ported number
D. Expected switch billing records are created

4.3.12 ~~Roaming~~ Non-Ported Wireline Subscriber calling a Roaming Non-Ported Wireless Subscriber in same LATA. (SEE APPENDIX B DRAWING A)

Test Description:

This will validate that a ~~roaming~~ call can be completed from a non-ported Wireline number to a roaming non-ported wireless number when both are in the same LATA.

Test Procedure:

1. From a non-ported Wireline number ~~that is roaming~~
2. Call a ~~local~~ roaming non-ported wireless number in the same LATA
3. Document Test Results

Expected Results:

A. Switch performs NPDB query
B. Switch routes call to destination
C. Call completes to non-ported number
D. Expected switch billing records are created

4.3.13 ~~Roaming~~ Ported Wireline Subscriber calling Roaming Ported Wireless Subscriber in the roamer's home LATA. (SEE APPENDIX B DRAWING C)

Test Description:

This will validate that a ~~roaming~~ call can be completed over an IXC from a ported Wireline number to a roaming ported wireless number when the second subscriber is in the roamer's home LATA.

Test Procedure:

1. From a ported Wireline number ~~that is roaming~~
2. Call a ~~local~~ roaming ported wireless number in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.3.14 ~~Roaming~~ Ported Wireline Subscriber calling Roaming Wireless Non-Ported Subscriber in their home LATA. (SEE APPENDIX B DRAWING C)

Test Description:

This will validate that a ~~roaming~~ call can be completed over an IXC from a ported Wireline number to a roaming non-ported wireless number when the second subscriber is in their home LATA.

Test Procedure:

1. From a ported wireless number ~~that is roaming~~
2. Call a ~~local~~ roaming non-ported Wireline number in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E. Expected switch billing records are created

4.3.15 ~~Roaming~~ Non-Ported Wireline Subscriber calling a Roaming Ported Wireless Subscriber in their home LATA. (SEE APPENDIX B DRAWING C)

Test Description:

This will validate that a ~~roaming~~ call can be completed over an IXC from a non-ported Wireline number to a roaming ported wireless number when the second subscriber is in their home LATA.

Test Procedure:

1. From a non-ported wireless number ~~that is roaming~~
2. Call a ~~local~~ roaming ported Wireline number in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to ported number
E. Expected switch billing records are created

4.3.16 ~~Roaming~~ Non-Ported Wireline Subscriber calling a Roaming Non-Ported Wireless Subscriber in their home LATA. (SEE APPENDIX B DRAWING C)

Test Description:

This will validate that a ~~roaming~~ call can be completed over an IXC from a non-ported Wireline number to a roaming non-ported wireless number when the second subscriber is in their home LATA.

Test Procedure:

1. From a non-ported Wireline number ~~that is roaming~~
2. Call a ~~local~~ roaming non-ported wireless number in their home LATA
3. Document Test Results

Expected Results:

A. Originating Switch routes call to N-1 carrier
B. N-1 carrier performs NPDB query
C. N-1 carrier routes call to terminating network
D. Terminating network completes call to Non-ported number
E. Expected switch billing records are created

4.4 WIRELINE / WIRELINE

Test cases contained within this section test call completion from a Wireline phone, to a Wireline phone, in a porting environment. The test cases assume that the ported numbers have been ported in from Wireless SP(s).

4.4.1 Ported Wireline Subscriber calling Ported Wireline Subscriber in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a local Wireline call can be completed from a ported in Wireless number to a ported in Wireless number in a Wireline switch when both are in the same LATA.

Test Procedure:

- From a local Wireline ported number
- Call a local Wireline ported number in the same LATA
- Document Test Results

Expected Results:

- Switch performs NPDB query
- Switch routes call to destination
- Call completes to ported number
- Expected switch billing records are created

4.4.2 Local Ported Wireline Subscriber calling Wireline Non-Ported Subscriber in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a local Wireline call can be completed from a ported in Wireless number to a non-ported Wireline number when both are in the same LATA.

Test Procedure:

- From a local Wireline ported number
- Call a local Wireline non-ported number in the same LATA
- Document Test Results

Expected Results:

- Switch performs NPDB query
- Switch routes call to destination
- Call completes to non-ported number
- Expected switch billing records are created

4.4.3 Local Non-Ported Wireline Subscriber calling a Ported Wireline Subscriber in same LATA. (SEE APPENDIX B DRAWING E)

Test Description:

This will validate that a local Wireline call can be completed from a non-ported Wireline number to a ported in Wireless number in a Wireline switch when both are in the same LATA.

Test Procedure:

- From a local non-ported Wireline number
- Call a local ported Wireline number in the same LATA
- Document Test Results

Expected Results:

- Switch performs NPDB query
- Switch routes call to destination
- Call completes to ported number
- Expected switch billing records are created

4.4.4 Local Ported Wireline Subscriber calling Ported Wireline Subscriber in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a Wireline call can be completed over an IXC from a ported in Wireless number to a ported in Wireless number when the second subscriber is in a different Wireline switch and LATA than the originator of the call.

Test Procedure:

- From a local ported Wireline number
- Call a local ported Wireline number in a different LATA
- Document Test Results

Expected Results:

- Originating Switch routes call to N-1 carrier
- N-1 carrier performs NPDB query
- N-1 carrier routes call to terminating network
- Terminating network completes call to ported number
- Expected switch billing records are created

4.4.5 Local Ported Wireline Subscriber calling Wireline Non-Ported Subscriber in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a Wireline call can be completed over an IXC from a ported in Wireless number to a non-ported Wireline number when the second subscriber is in a different LATA than the originator of the call.

Test Procedure:

- From a local ported Wireline number
- Call a local non-ported Wireline number in a different LATA
- Document Test Results

Expected Results:

- Originating Switch routes call to N-1 carrier
- N-1 carrier performs NPDB query
- N-1 carrier routes call to terminating network
- Terminating network completes call to Non-ported number
- Expected switch billing records are created

4.4.6 Local Non-Ported Wireline Subscriber calling a Ported Wireline Subscriber in a different LATA. (SEE APPENDIX B DRAWING F)

Test Description:

This will validate that a Wireline call can be completed over an IXC from a non-ported Wireline number to a ported in Wireless number in a Wireline switch when the second subscriber is in a different LATA than the originator of the call.

Test Procedure:

- From a local non-ported Wireline number
- Call a local ported Wireline number in a different LATA
- Document Test Results

Expected Results:

- Originating Switch routes call to N-1 carrier
- N-1 carrier performs NPDB query
- N-1 carrier routes call to terminating network
- Terminating network completes call to ported number

Expected switch billing records are created

.5 Enhanced Services

This ~~test~~section will verify that enhanced services that are common to all Wireless and Wireline SP's, such as 911 calling and operator services, are not impacted by number portability.

~~Note: There are three phases of 911. It is suggested that all carriers test 911 calls in all three phases~~

- ~~Phase 0 is a wireless 911 solution that may provide no ALI display information or may provide cell site/face information, dependent on local agreements.~~
- ~~Phase 1 is a wireless 911 solution that provides call back number and cell site/face information.~~
- ~~Phase 2 is a wireless 911 solution that provides Phase 1 data plus the location of the caller (x/y coordinates).~~

4.45.1 911 Call From a ~~Wireline to Wireless or a Wireless to Wireless~~ Ported wireless number ~~in an open NPA-NXX (network)~~

Note: There are three phases of 911. It is suggested that all carriers test 911 calls in all three phases

- Phase 0 is a wireless 911 solution that may provide no ALI display information or may provide cell site/face information, dependent on local agreements.
- Phase 1 is a wireless 911 solution that provides call back number and cell site/face information.
- Phase 2 is a wireless 911 solution that provides Phase 1 data plus the location of the caller (x/y coordinates).

Test Description:

This will test that a wireless ported number ~~in the ported number wireless network~~ can place a 911 call.

Test Procedure:

1. Schedule tests with 911 system prior to test date/time
2. Call initiated by dialing 911.
3. Ask PSAP to transfer the call to another PSAP.
4. Ask the original PSAP to call back the number displayed
5. Ask the original PSAP to check with the Neustar IVR for company ID and 24/7 security phone number and to call it
6. If a wireline to wireless port, verify with donor company that ALI record has been deleted from the appropriate 911 database
7. Document test results, including time required for all transitional steps
8. Report results of tests to the Implementation Project Manager using provided forms

Expected Results:

A. Correct PSAP receives the call.
B. Correct information (phase 0, 1, or 2*) displayed.
C. PSAP transfer works and correct data displayed.
D. Call back to the number works.
E. Number is in Neustar IVR.
F. Company name and 24/7 security number are correct in IVR.
G. The number with its corresponding ALI record is deleted from the wireline 911 database (only if a wireline to wireless port)

4.45.2 911 Call From a ~~Wireless to Wireline~~ Ported wireline number ~~in an open NPA-NXX (network)~~

Test Description:

This will test that a ported wireline number ~~in the ported number wireline network~~ can place a 911 call.

Test Procedure:

1. Schedule tests with 911 system prior to test date/time
2. Call initiated by dialing 911.
3. Ask PSAP to transfer the call to another PSAP.
4. Ask the original PSAP to call back the number displayed
5. Ask the original PSAP to check with the Neustar IVR for company ID and 24/7 security phone number and to call it
6. Document test results, including time required for all transitional steps
7. Report results of tests to the Implementation Project Manager using provided forms

Expected Results:

A. PSAP receives ANI/CPN and ALI for that number, this must be verified by PSAP that all information is correct. If the ALI is wrong due to another 911 issue, not because of portability, the PSAP follows the appropriate procedures existing today for that problem. (inquiry form)
B. Transfer PSAP verifies same data
C. Call terminates to your originating TN that initiated 911 call
D. Company ID in database shows your company abbreviation
E. Upon reaching your center, they verify that they have reached your company and the appropriate center to request trap and traces, etc.

4.54.3 911 Call fFrom a Roaming ported Wireless ~~to Wireline Ported number while Roaming~~

Test Description:

This will test that a roaming ported wireless number ~~of a wireless carrier on a roaming network~~ can place a 911 call.

Test Procedure:

- Schedule tests with 911 system prior to test date/time
- Call initiated by dialing 911.
- Ask PSAP to transfer the call to another PSAP.
- Ask the original PSAP to call back the number displayed
- Ask the original PSAP to check with the Neustar IVR for company ID and 24/7 security phone number and to call it
- Document test results, including time required for all transitional steps
- Report results of tests to the Implementation Project Manager using provided forms

Expected Results:

- Correct PSAP receives the call.
- Correct information (phase 0, 1, or 2*) displayed.
- PSAP transfer works and correct data displayed.
- Call back to the number works.
- Number is in Neustar IVR.
- Company name and 24/7 security number are correct in IVR.

4.54.4 An Operator Assisted (0- and 0+) Intra LATA Call from a Ported ~~In~~ Number to a Ported ~~Out~~ Number with Originating LRN obtained from LNP Database (SEE APPENDIX B DRAWING SE1)

Test Description:

This will test that an OSS is LNP capable for completing a wireless intra-LATA call to ported number and the call can be billed to the originating number and correctly populating the AMA modules to the AMA record for recording the call. The calling party's LRN information to be populated in the AMA record is obtained from the LNP database.

Test Procedure:

1. The calling party is a ported number
2. The called party is a ported number in a different network
3. The calling party dials 0 and informs the operator to complete the call to a ported intra LATA number and bill the call to the calling party number

Test Results:

A. Call is completed to the ported intra LATA number
B. Originating LRN obtained from LNP Database.
C. AMA record is correctly generated.
D. The customer is not double billed.

4.54.5 Alternately Billed call placed from a Ported ~~-In~~ Number to a Ported ~~-Out~~ Number with Originating LRN obtained from LNP Database. (SEE APPENDIX B DRAWING SE2)

Test Description:

Wireless Switch completes and alternately billed call (3rd party billing, Calling card, collect, etc.) from a ported number to a ported number billed to a ported number.

Test Procedure:

1. The called party, calling party and billed number are all ported numbers on three different networks
2. Caller dials 0+Ported Destination Number and requests that the live operator complete the call using a ported billing number
3. Originating LRN obtained from LNP Database

Test Results:

A. Originating LSP routes call to the OSS
B. Call is completed to the ported intra LATA number
C. Originating LRN obtained from LNP Database.
D. AMA record is correctly generated.
E. The customer is not double billed.

4.45.6 Operator service call (0+ and 0-) from a Portedr number to a Ported number on Different Networks. (SEE APPENDIX B DRAWING SE6)

Test Description:

A customer calls an OSS from a ported number and requests that the live operator place a call to the dialed ported number and bill the dialed ported number. The two numbers involved in this call should be on different networks.

Test Procedure:

1. The called party and calling party numbers are ported numbers on different networks within the Portable NPA-NXX
2. Caller dials 0+Ported Destination Number and requests that the live operator complete the call and bill the dialed ported number (collect call)
3. Originating LRN obtained from LNP Database

Test Results:

A. Originating LSP routes call to the OSS
B. Call is completed to the ported intra LATA number
C. Originating LRN obtained from LNP Database.
D. AMA record is correctly generated.
E. The customer is not double billed.

4.5.7 Operator service call (0+ and 0-) from a Roaming wireless ported number to a Ported number on Different Networks. (SEE APPENDIX B DRAWING SE6)

Test Description:

A roaming customer calls an OSS from a ported number and requests that the live operator place a call to the dialed ported number and bill the dialed ported number. The two numbers involved in this call should be on different networks.

Test Procedure:

1. The called party and calling party numbers are ported numbers on different networks
2. Caller dials 0+Ported Destination Number and requests that the live operator complete the call and bill the dialed ported number (collect call)
3. Originating LRN obtained from LNP Database

Test Results:

A. Originating LSP routes call to the OSS
B. Call is completed to the ported intra LATA number
C. Originating LRN obtained from LNP Database.
D. AMA record is correctly generated.
E. The customer is not double billed.

4.6 Global Title Translation

4.6.1 Caller Name Delivery - Ported Number to Ported Number

Test Description:

This will test that the Caller Name (SCP based CNAM) is delivered on an intra-LATA call from a ported number to a ported number. Scenarios should include calls originating from both wireline and wireless terminating to both wireline and wireless numbers. Networks supporting SCP database delivery of CNAM should include the appropriate GTA data in SOA and LSMS Overide.

Test Procedure

1. A calls B by dialing the DN.
2. A hears audible ringing
3. B does not answer until 2nd ring cycle
4. B's display shows A's Caller ID (DN) and Name.
5. A and B disconnect from call.

Results

A. Caller ID and Name are delivered to the destination

Line Information Database

Since no carriers have stated they do their own queries (operator services do query instead), we agreed that the following test cases will be appropriate to test a LIDB query for GTT.

Test Cases

4.5.4 An Operator Assisted (0- and 0+) Intra LATA Call from a Ported Number to a Ported Number with Originating LRN obtained from LNP Database

4.5,5 Alternately Billed call placed from a Ported-In Number to a Ported-Out Number with Originating LRN obtained from LNP Database

4.5.6 Operator service call (0+ and 0-) from a Ported number on Different Networks

4.5.7 Operator service call (0+ and 0-) from a roaming ported number to a ported numberon Different Networks when roaming

Interswitch voice messaging (ISVM)

Wireless carriers do not use ISVM. Wireline carriers may want to test ISVM internally when a wireless number ports to wireline

Custom local area signaling services (CLASS)

Wireless carriers do not use CLASS. Wireline carriers may want to test CLASS internally when a wireless number ports to wireline.

Short messaging services (SMS)

There is no mobile originating SMS between providers to date. For example SMS message are not send from Company A customer to Company B customer. A company may send an SMS on your behalf but it will still terminate to your own network. This is considered an internal test. Until we have better visibility of the need for this, we will hold off on writing a test case. Also, standards for WNP and SMS are still relatively new (PN-4411).

APPENDICES

APPENDIX A - The Test Case Matrix

Appendix A is available as a guide for the call completion test cases. The matrix simplifies the test case descriptions to the core testing criteria such as the calling party, called party, LATA, etc.

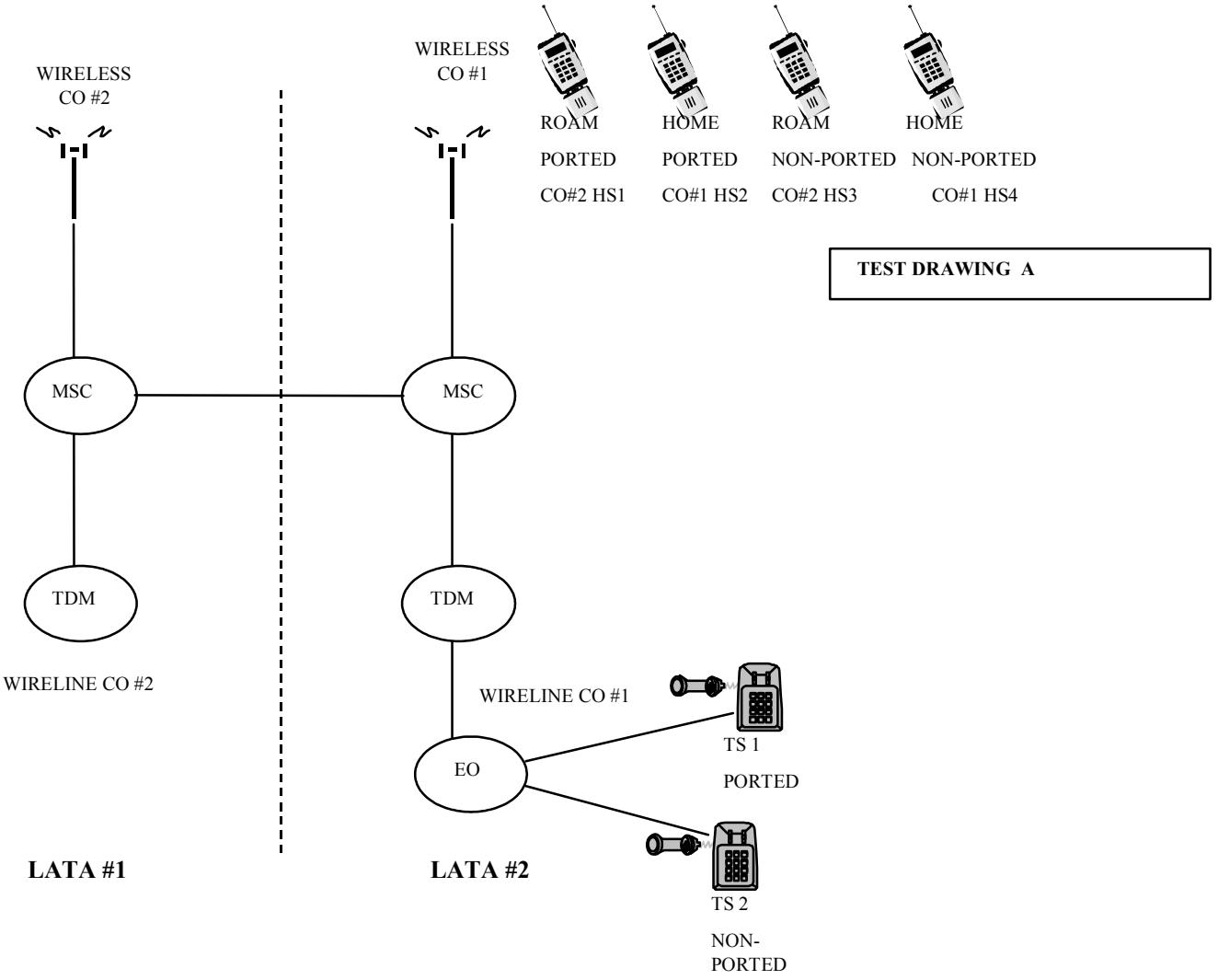
This is meant as a shortcut to see what characteristics are being tested. Most testing characteristics are tested in blocks. For example, test cases 4.2.1 – 8 all test non-roaming wireless originated calls while 4.3.9-16 test are a duplication of the first eight with the only exception being the wireless originated calls are roaming.

One item that needs defining on the test cases matrix is "porting scenarios". The WTSC decided that it would be a good idea to test where a port comes from when a ported number is involved in a call,either originating or receiving. To avoid having to write a test case for every single port scenario, a guide is offered at the bottom to tell the tester what port scenarios they can test. It will be up to each provider to decide the extent of this particular test.

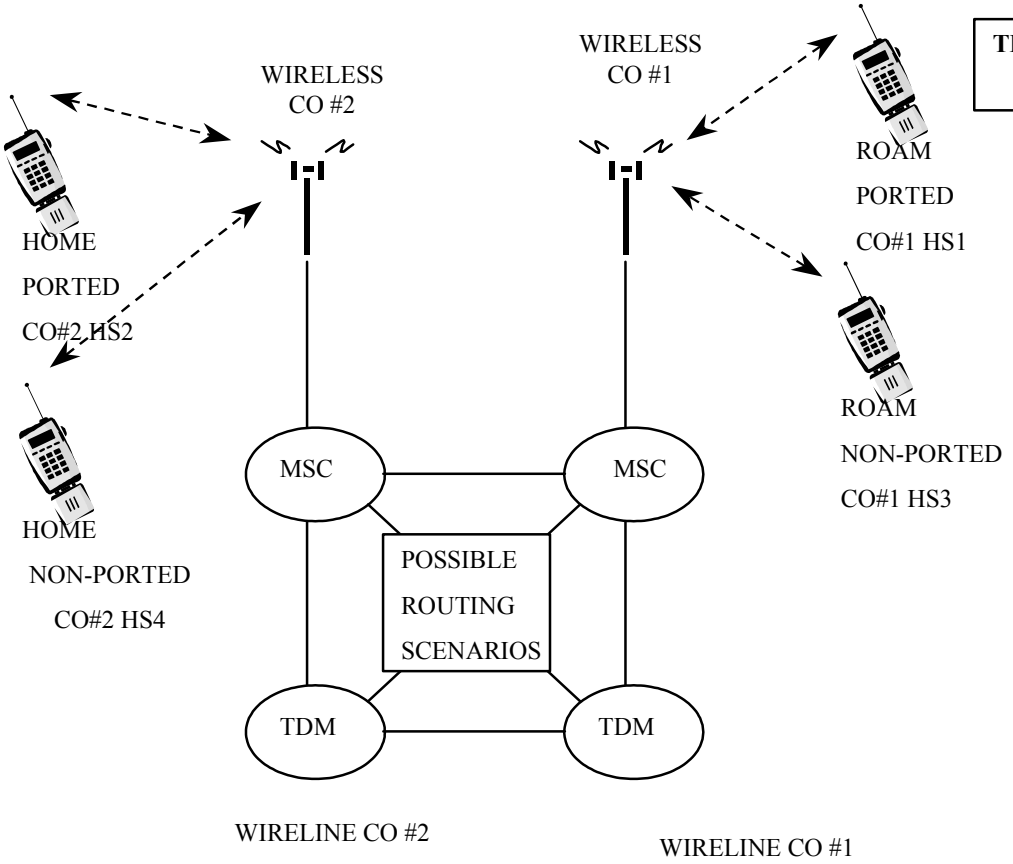
Using 4.1.1 as an example, the test case is a wireless ported number calling another wireless ported number. In this case, the called party can port from a wireless carrier to another wireless carrier or they port could be from a wireline carrier to a wireless carrier. The same is true for the called party. This would denote the port scenarios, A, B, E, and F. Port scenarios C, D, G, and H could not be possible test scenarios since there is no wireline carrier involved in either the calling or called party.

TestCase-Matrix.xls

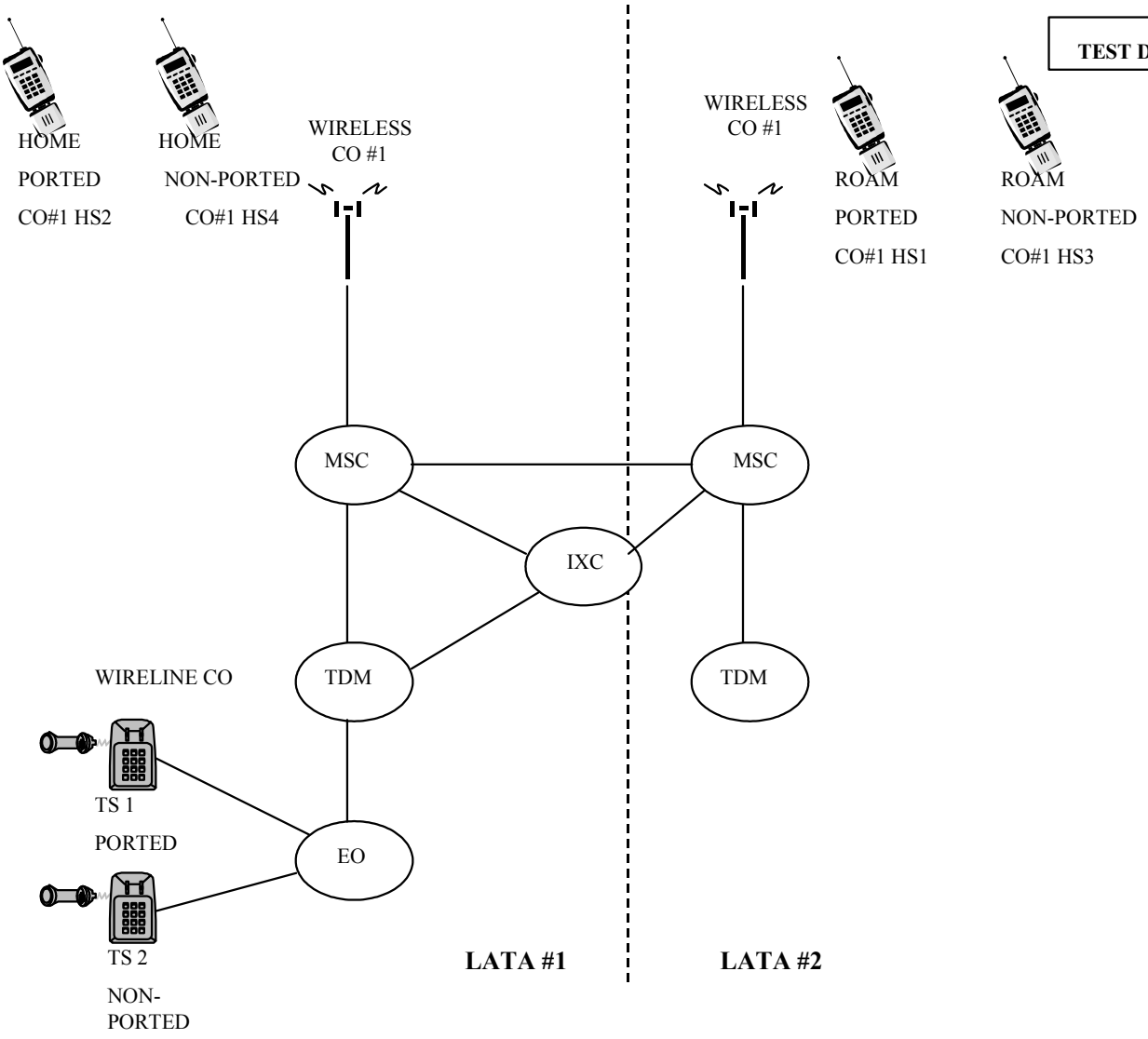
APPENDIX B Drawings that support each Test Script


WIRELESS
CO #2
WIRELESS
CO #1
ROAM
PORTED
CO#2 HS1
HOME
PORTED
CO#1 HS2
ROAM
NON-PORTED
CO#2 HS3
HOME
NON-PORTED
CO#1 HS4
TEST DRAWING A
MSC
MSC
TDM
TDM
WIRELINE CO #2
WIRELINE CO #1
EO
TS 1
PORTED
TS 2
NON-
PORTED
LATA #1
LATA #2

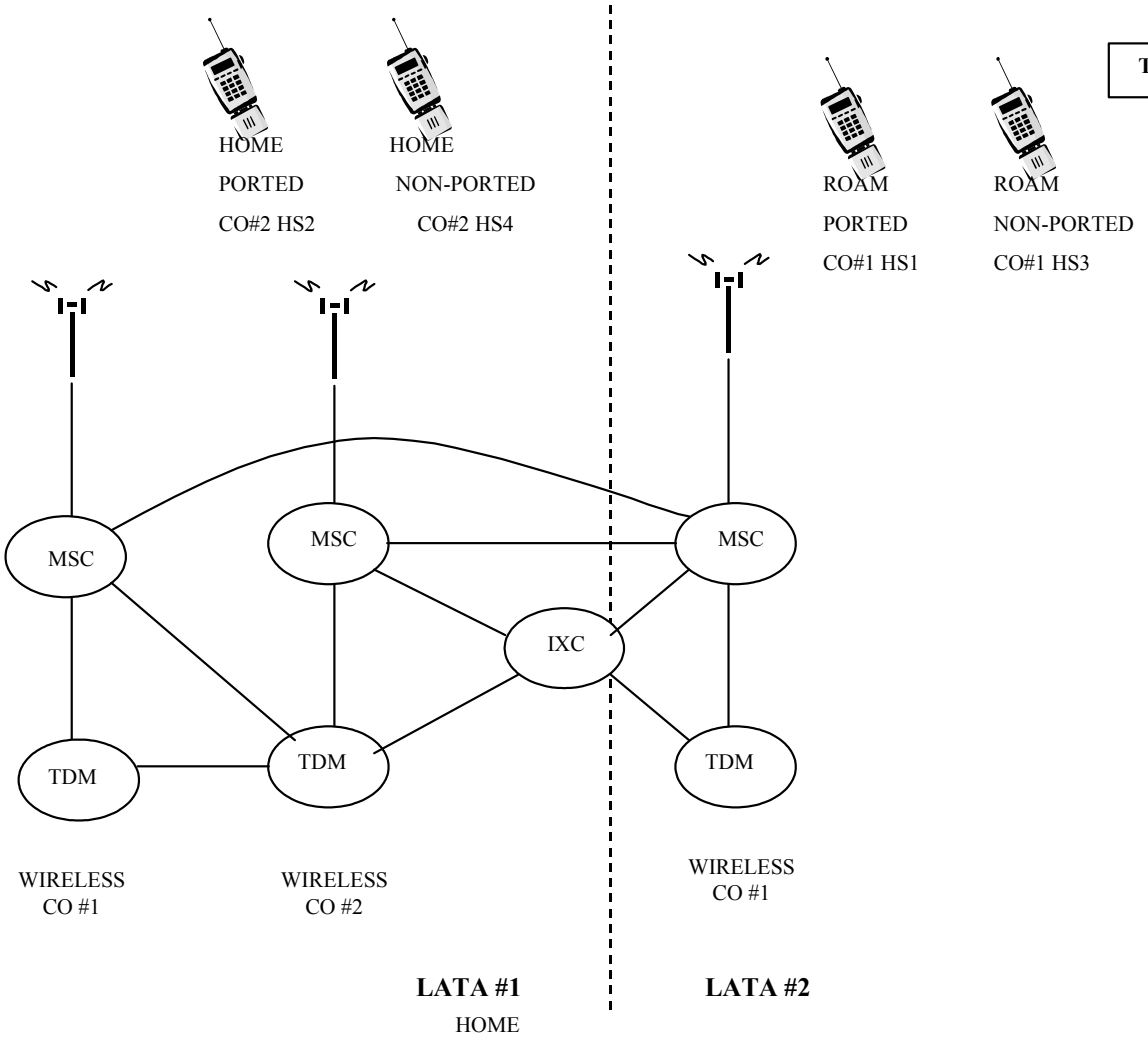
TEST DRAWING B



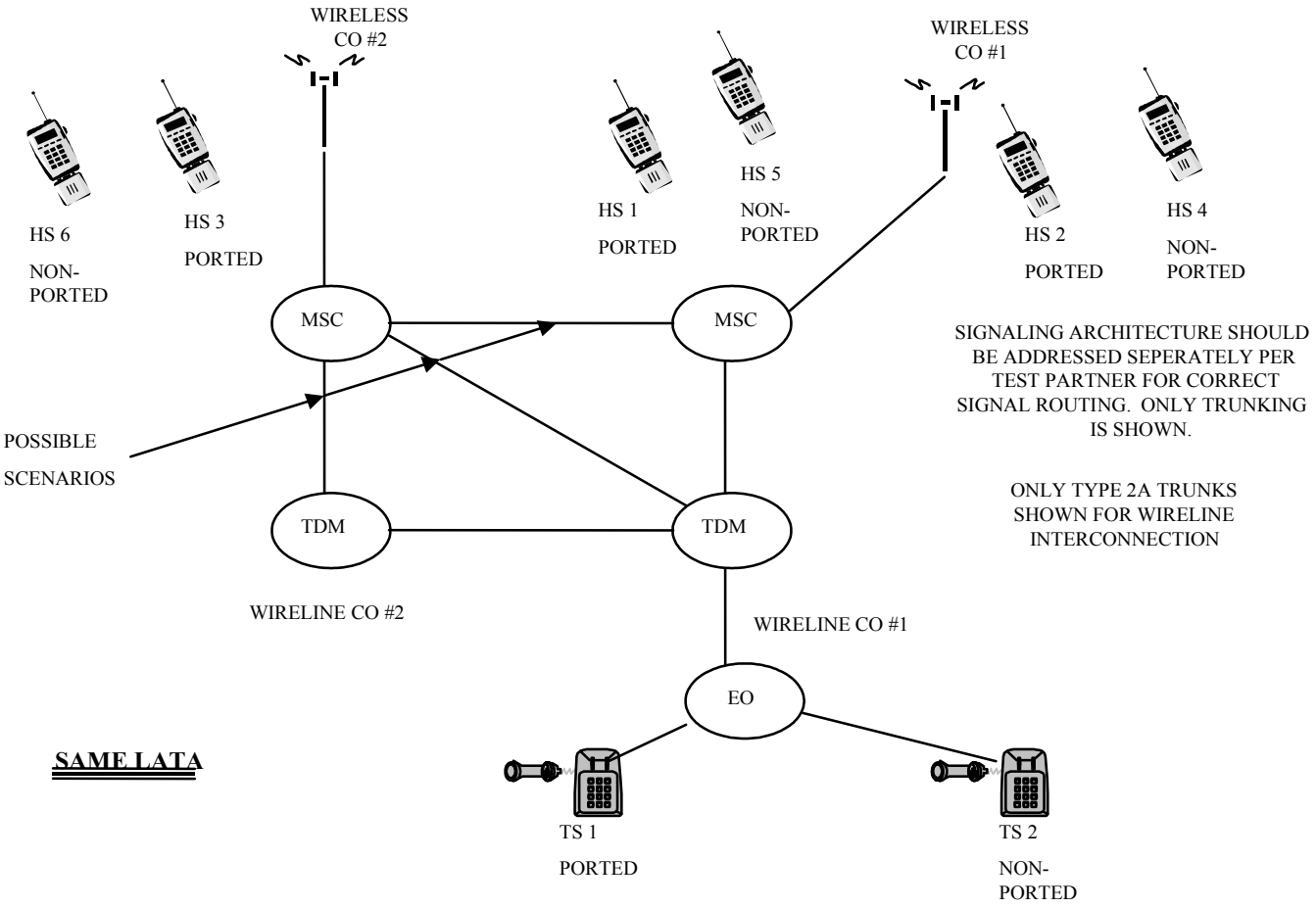
TEST DRAWING C

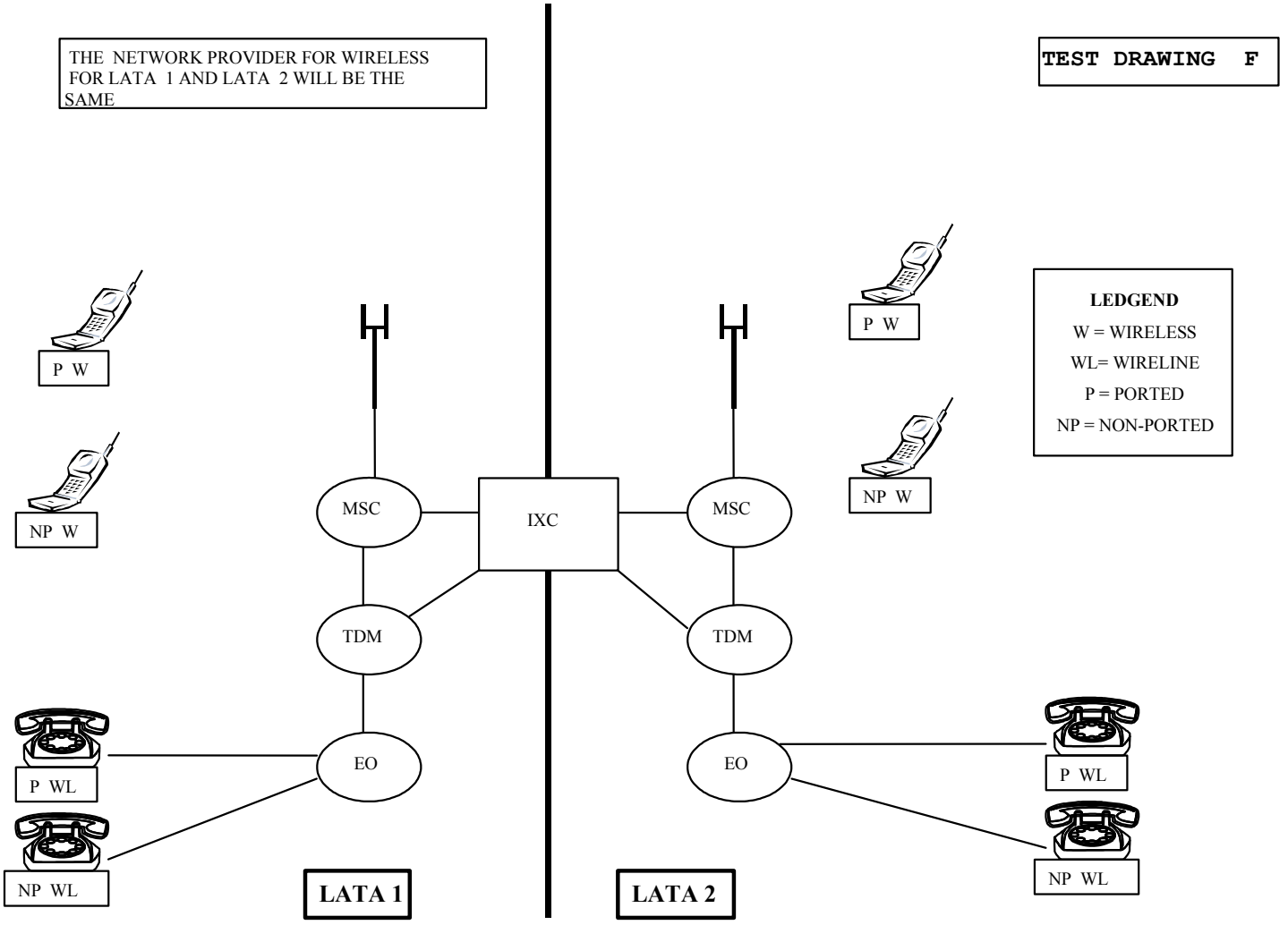


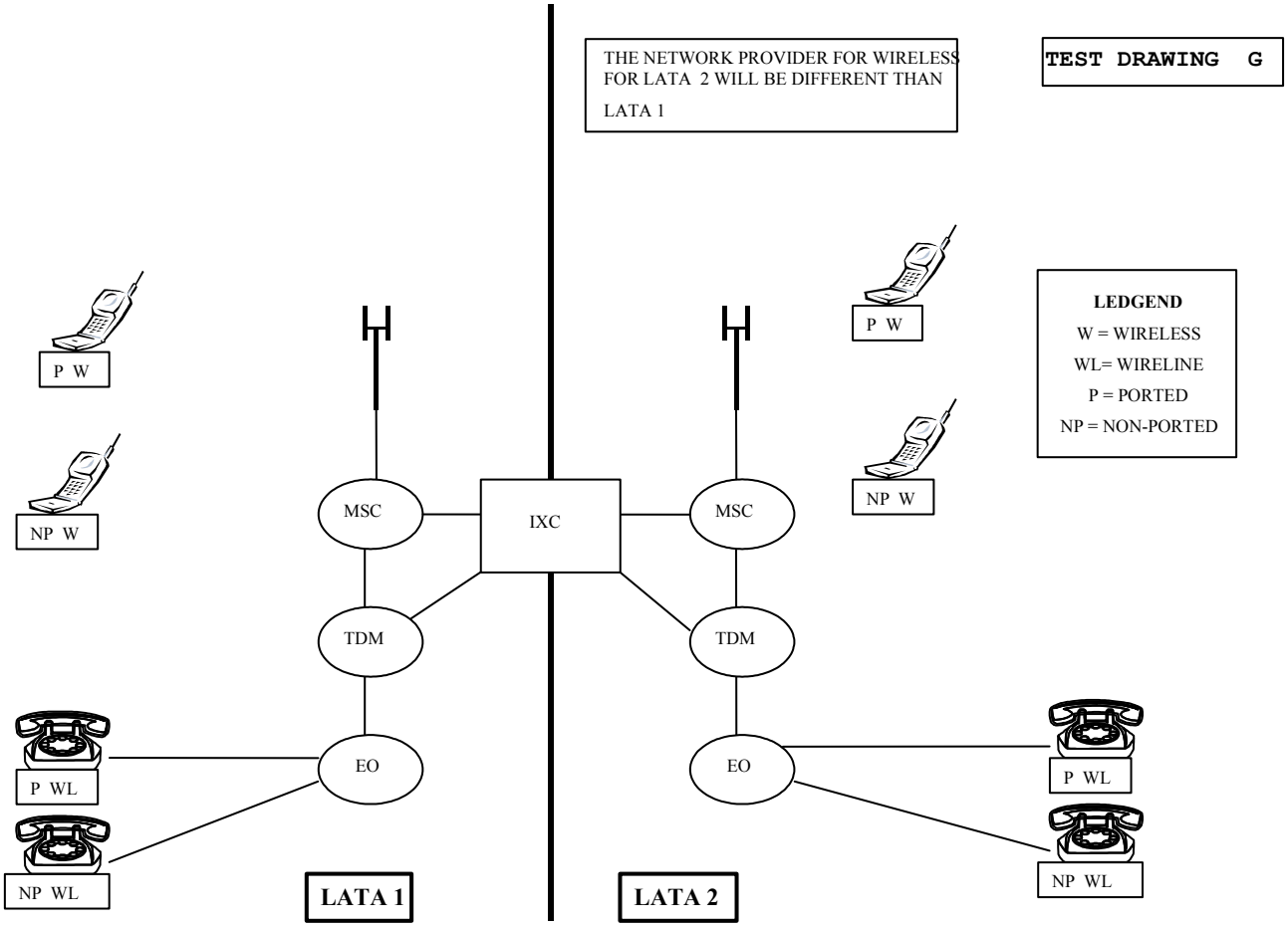
TEST DRAWING D

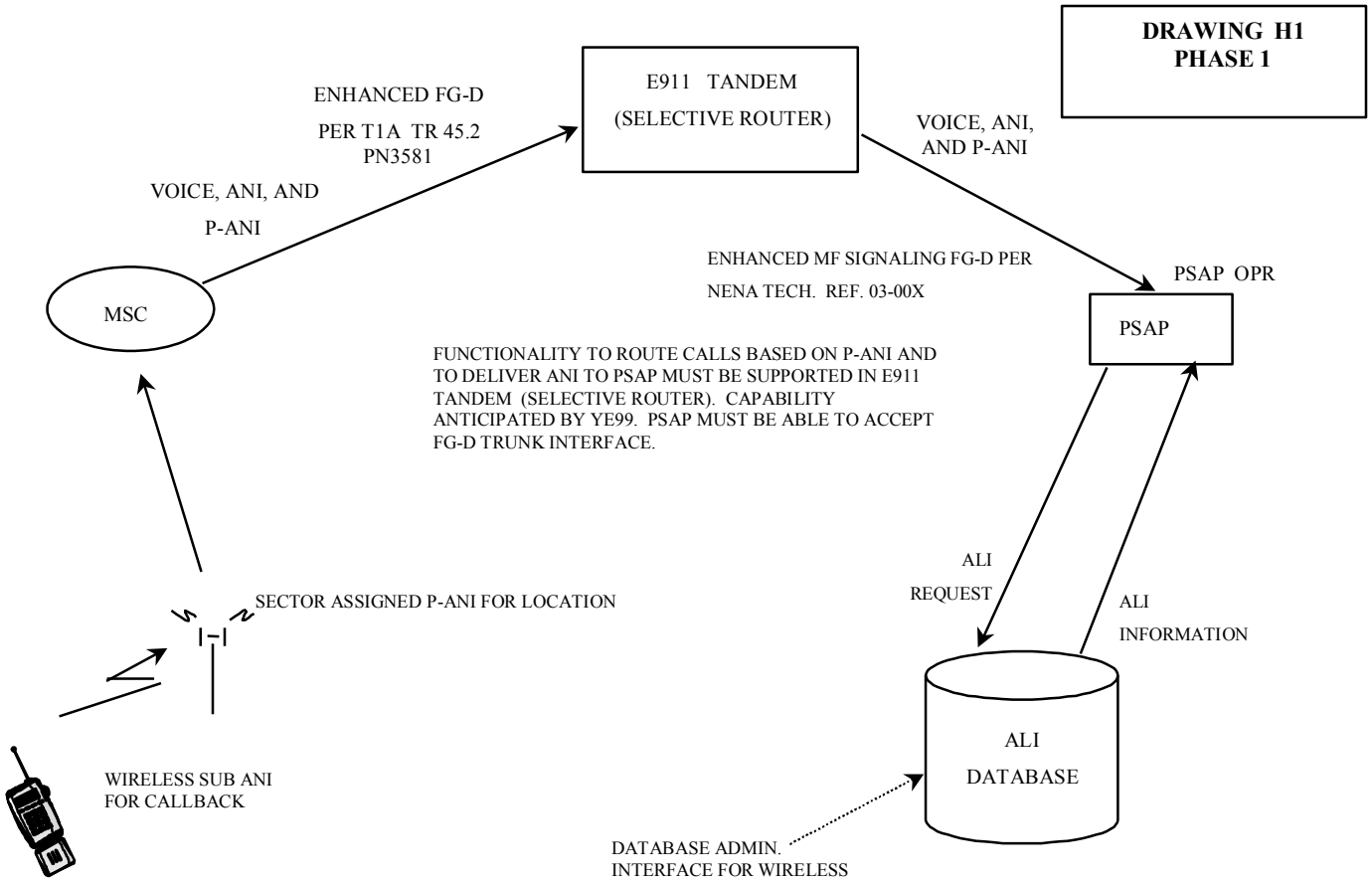


TEST DRAWING E

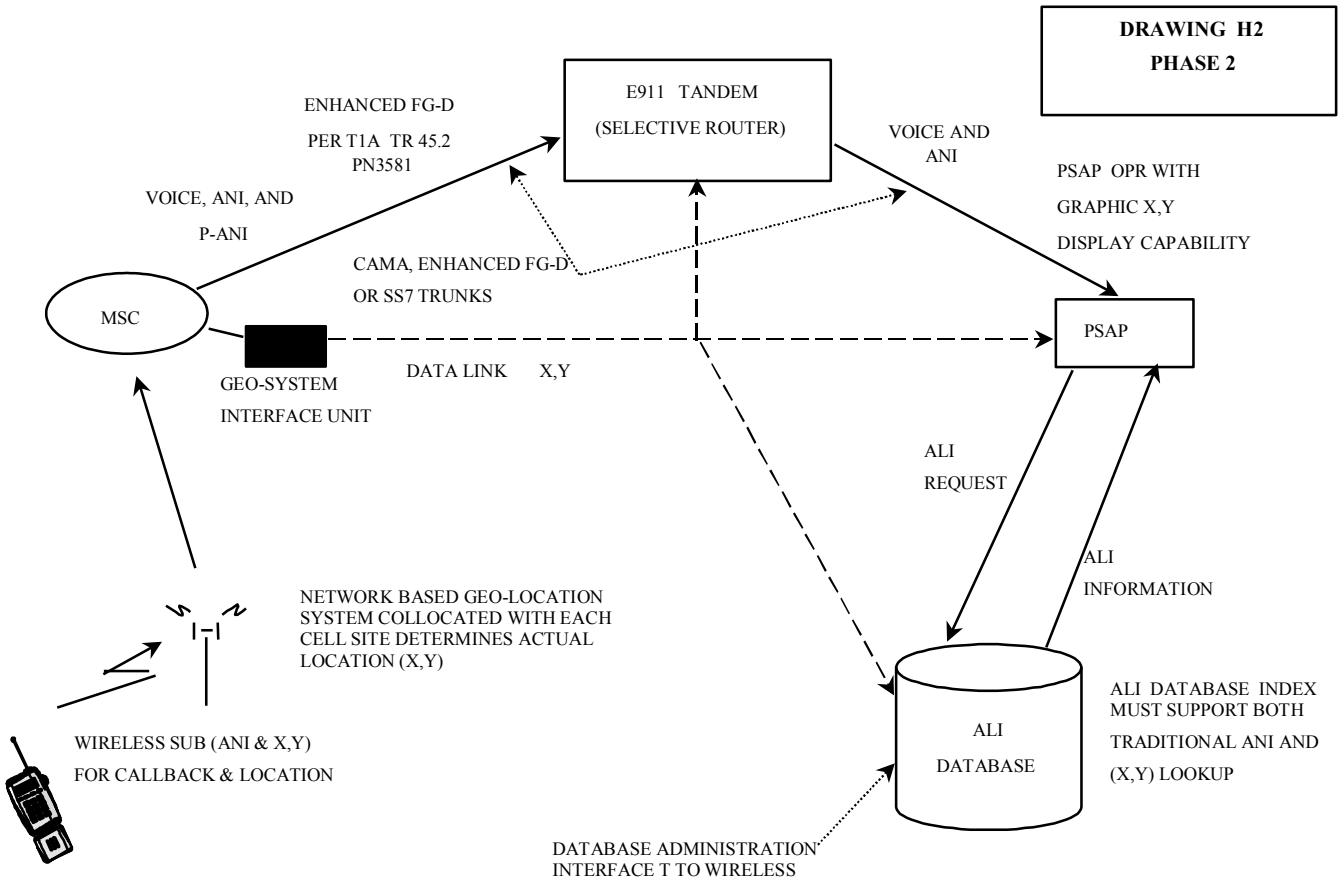



THE NETWORK PROVIDER FOR WIRELESS FOR LATA 1 AND LATA 2 WILL BE THE SAME
TEST DRAWING F
LEDGEND
W = WIRELESS
WL= WIRELINE
P = PORTED
NP = NON-PORTED
P W
NP W
P W
NP W
MSC
IXC
MSC
TDM
TDM
EO
EO
P WL
NP WL
P WL
NP WL
LATA 1
LATA 2


THE NETWORK PROVIDER FOR WIRELESS FOR LATA 2 WILL BE DIFFERENT THAN LATA 1
TEST DRAWING G
LEDGEND
W = WIRELESS
WL= WIRELINE
P = PORTED
NP = NON-PORTED
P W
NP W
P W
NP W
MSC
IXC
MSC
TDM
TDM
EO
EO
P WL
NP WL
P WL
NP WL
LATA 1
LATA 2



DRAFT - ARCHITECTURE PHASE 1



DRAFT- ARCHITECTURE PHASE 2

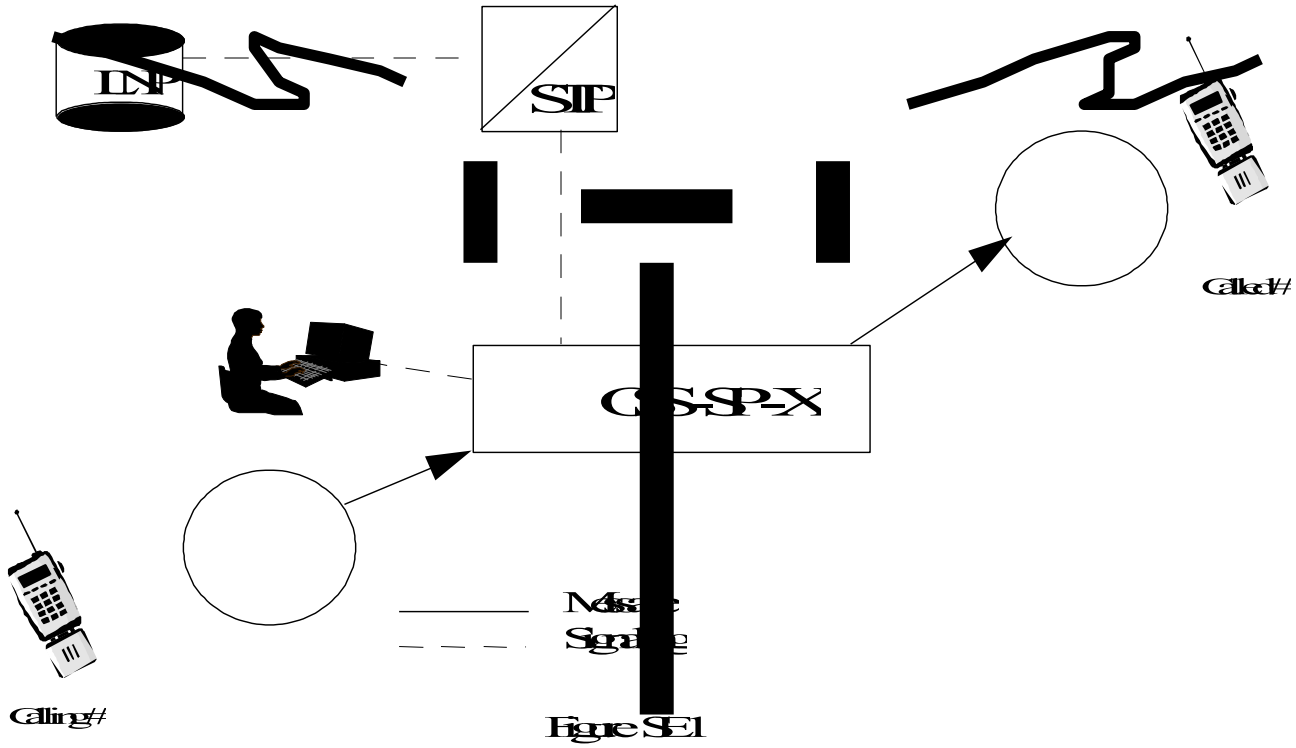


Figure SE1

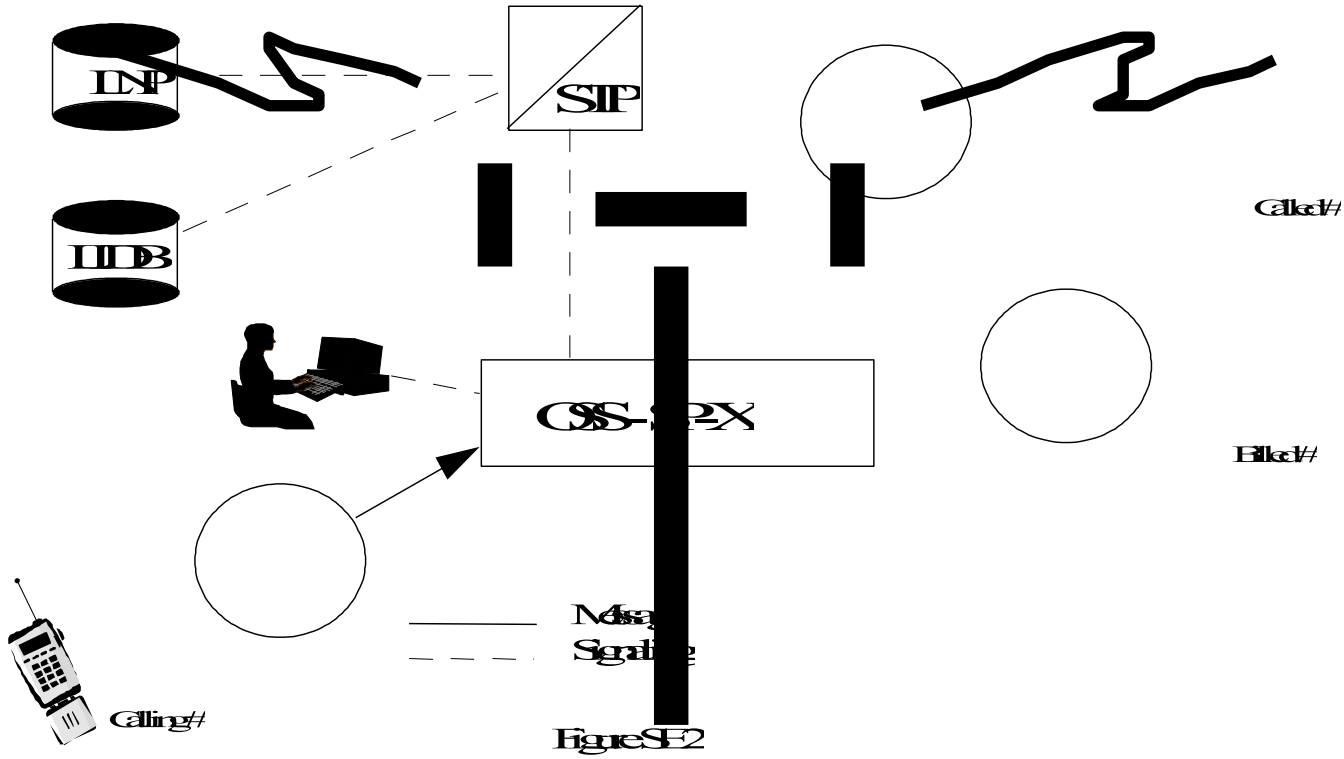


Figure S-2

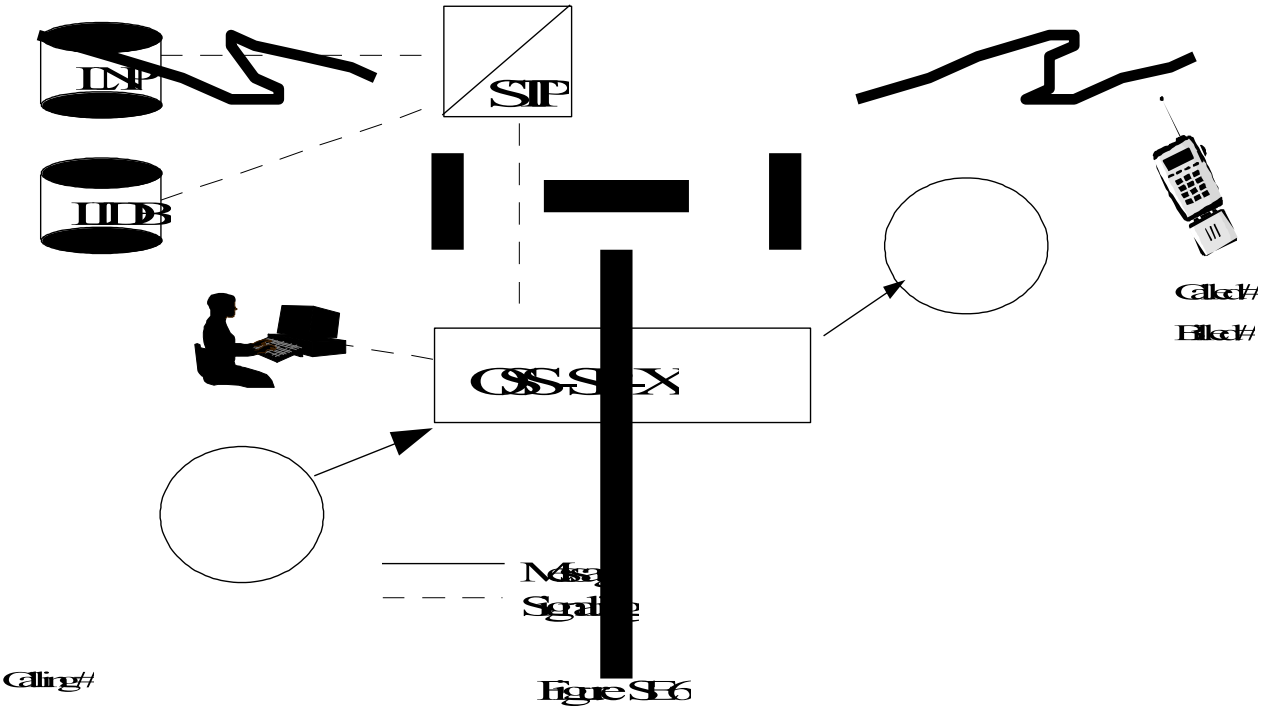


Figure 5-6

Appendix C – Multiple test scenarios

This appendix is intended to provide scenarios where multiple test cases can be performed on one TN.

A port can be performed between providers and then any combination of test calls can be made to verify that the number ported correctly. A blank test scenario sheet is at the end for providers to copy and write their own test scenarios.

Scenario Number	00001
Description	Wireline customer ports to wireless post-paid service, completes a local call, a call to a local wireless numbe a call to 911; then disconnects.

Test Cases and associated test case numbers:

TEST CASE NAME	PASS/FAIL	TEST CAS NUMBER
Port Request Validation (WLN – WLS		4.0.9
Ported wireless subscriber calling ported wireline subscriber in same lata		4.2.1
Ported wireless subscriber calling ported wireless subscriber in the same lata		4.1.1
911 Call from a ported wireless number		4.5.1
Disconnect ported subscribers service		4.0.3
-		-

Scenario Number	00002
Description	Wireless customer ports to wireless post-paid service, completes a long distance call to another ported wirele subscriber, a call to a local wireline non-ported number, and a call to 911; then disconnects.

Test Cases and associated test case numbers:

TEST CASE NAME	PASS/FAIL	TEST CAS NUMBER
PortRequest Validation (WLS - WLS)		4.0.7
Ported wireless subscriber completes a long distance call to another ported wireless subscriber		4.1.13
Ported wireless subscriber calling local non-ported wireline subscriber in the same lata		4.2.2
911 Call from a wireless ported number		4.5.1
Disconnect ported subscriber's service		4.0.3
-		-

Scenario Number	00003
Description -	Wireless customer ports to wireless post-paid service, completes a long distance call to a wireline number tha been ported from wireless service, receives an incoming call from a local ported wireless number, and a call t 911; then ports back to original service provider.

Test Cases and associated test case numbers:

TEST CASE NAME	PASS/ FAIL	TEST CAS NUMBER
Port Request Validation with Resolution Required (WLS-WLS)		4.0.8
Operator service call from a ported number to a ported number on different networks -		4.5.6
Ported wireless subscriber calling ported wireless subscriber in the same lata		4.1.1
Port to Original		4.0.6
-		-

Scenario Number	
Description	

Test Cases and associated test case numbers:

TEST CASE NAME	PASS/ FAIL	TEST CAS NUMBER
-		-

Appendix D – Test Results Matrix
This is a draft version. The actual test cases from this document will be inserted accordingly.

Test_Index_Form_example.xls

APPENDIX ~~C~~E Checklist for Entry for use by the individual companies

INTER-COMPANY TEST READINESS CHECKLIST

Checklist Instructions: Review checklist and enter "Y" in the Complete column once the criteria is met. If a criteria will not be met for the start of test execution or is not applicable, indicate "N" or "N/A" in the Complete column. Comments are required if criteria will not be met or are not applicable. If applicable, attach supporting documentation for each met criteria. Checklists should be exchanged between each pair of service providers participating in a specific iteration of the test.

#	Complete	Test Readiness Criteria	Comments
		Logical Test Planning	
1.		Test cases from the Wireless Number Portability Inter-Carrier Test Plan have been reviewed, selected, and agreed to by test participants.	
2.		Any additional test scenarios or requirements have been agreed to by test participants.	
3.		Test validation points have been identified and confirmed by test participants. These validation points will be reviewed and tracked in execution status calls.	
4.		The following dates have been agreed to by test participants: - Date for start of test execution - Due date interval for test service orders (*i.e.* 3 day due date, same day due date, etc) - Duration of test window (estimated maximum of 45 calendar days)	
		Physical Test Planning	
5.		Following information has been completed and exchanged between test participants: - Rate Center to be used for test. Both test participants must have at least one NPA-NXX that serves the selected Rate Area, as defined by LERG. - NPA-NXXs to be used by both participants - LRN of each switch (wireless MSC and Wireline end office - OCN for each participant - NPAC SPID for each participant	
6.		Test account information has been exchanged between participants. Information includes: - Test Account User/Billing Name - Telephone Number(s)	Need more accurate fields listed here.

#	Complete	Test Readiness Criteria	Comments
		- Service/Billing Address (Wireline only)	
7.		Test codes are registered in the E911 system. Embedded records have been inserted into the E911 database for all test accounts where appropriate. E911 account records must be in place before LNP unlock/migrate/delete transactions can complete for Wireline service providers.	
8.		Test participants have marked the NPA-NXXs to be used for test as 'portable' in both LERG and NPAC.	
		Pre-Test Preparation	
9.		Each participant has fully tested and validated all modifications to internal business processes and systems. This includes, but is not limited to: - Internal Software for SOA - Internal Software for LSMS - Internal Processes for SOA - Internal Processes for LSMS - Inter-carrier Communications software - Inter-carrier Communications processes - Switch Upgrades - Network Upgrades - Internal Software for MSID/MDN split - Internal Processes for MSID/MDN split - Internal Software to allow customers to port MDNs in and out - Internal Processes to allow customers to port in and out - Roaming Agreements - Procedures for Foreign Roamers - Reseller Agreements and Processes	
10,		If applicable, other interface agreements are in place (*i.e.* CPCN agreements, E911 database access). Notify E911 local coordinator about impending tests and schedule.	
11.		Each participant understands the documented NANC and NENA processes for LNP and Local Competition.	
12.		Inter-Carrier communication training for both test participants is complete.	
13.		Each participant's switch is LNP capable.	
14.		Each participant has signed Service Level Agreements with the other participant(s).	
15.		Each participant has SS7 access to an LRN database.	
16.		Each participant has installed and completely tested their own SOA and LSMS and is certified by the appropriate regional Number Portability Administration Center (NPAC), or receives access to the appropriate regional NPAC through a certified carrier.	
17.		Contact information for both carriers has been distributed to the industry for the following: - LSR contact name, phone number, Fax - E911 administrator name & phone number (where appropriate) - 7x24 Network support	

#	Complete	Test Readiness Criteria	Comments
18.		A conference bridge has been identified for regular status reporting and inter-company communication during the test. Communication should include status relative to agreed upon inter-company validation points and any outstanding inter-company LNP issues.	

Inter-Company Test Readiness Sign-Off

Once the checklist has been completed and updated with appropriate comments, contacts from both test participants should sign below indicating each carrier's readiness to perform inter-company LNP testing.

Service Provider #1:	
Testing Coordinator:	
Phone #:	
Signature:	

Service Provider #2:	
Testing Coordinator:	
Phone #:	
Signature:	

APPENDIX FD Checklist for Entrance

Entrant LNP Test Network Information. This sample form represents the information necessary for Wireline carriers. Wireless carriers will find that many of these fields are not applicable

Network Information Submitted by:_____
Company: _____
Name: _____
Title: _____
Phone: _____ Fax: _____
Pager: _____ PIN: _____
Email: _____
Mailing Address: _____ City: _____ State: _____ Zip: _____

NPAC SPID Number for the testing area:_____
Account numbers established for testing
Does your company intend to test vertical features between Field Test Participant's? Yes ___ No ___

What Translation Type does your company intend to use for the testing?
Translation Type CLASS =
Translation Type CNAM =
TT Destination Point Code =
DCP Destination Point Code =

Participant Contacts and Information

Location Information: City _____State_____
Rate Center NPA-NXX: _____ Rate Center Name:_____ _____
NPA-NXX_____
Rate Center Name: _____ NPA-NXX_____
Phone number at Switch: _____
Fax number at Switch: _____
Numbers reserved for the field-test _____
911 Provider: _____

Overall Test Manager / Coordinator:
Name: _____
Phone: _____
Fax number: _____
Pager number: _____Pin _____
Email address: _____
Person to contact for escalation: _____
Title: _____ Phone: _____
Email address: _____ Pager _____ Pin_____

Does your company provide contact and other interface information on a web site?
If yes, address: _____
Will this be used during the various testing activities?

APPENDEX GE Checklist for Exit

CHECKLIST FOR EXIT

Inter-Company Test Execution Exit Checklist

Checklist Instructions: Review checklist and enter "Y" in the Met column if the criteria has been met at the end of test execution. If criteria has not be met at the end of test execution or is not applicable, indicate "N" or "N/A" in the Met column. Comments are required if criteria has not been met or is not applicable.

Sign the completed checklist and deliver to the other company(ies) participating in the Inter-Company Test.

Testing Stage:	Inter-Company Test
Your Company Name:	
Test Coordinator:	
Test Coordinator Signature:	

#	Met	Test Execution Exit Criteria	Comments
1		All required test cases have been successfully executed	Do we need required, conditional, optional test cases ?
2		All specified conditional test cases have been successfully executed	
3		All mutually agreed upon optional test cases have been successfully executed	
4		Actual results for all Inter-company test cases are documented and match expected results	
5		Test planning documents updated to reflect final execution status for all test cases. (Wireless Number Portability Test Matrix appendix updated to reflect actual execution status of each test case.)	
6		All problems, defects, and errors from previous levels of testing have been retested and successfully validated	
7		Any inter-company workarounds have been documented, successfully tested and validated	
8		All testing metrics have been collected and are available upon request.	
9		Completed exit criteria checklist to be provided upon request.	
10		E911 testing conpleted	

Following to be completed by other company's Inter-Company Test Coordinator upon receipt and review of the completed checklist.	
Your company name:	
Exit Criteria Met (Y/N):	
Test Coordinator:	
Test Coordinator Signature:	
Date of Approval:	

APPENDIX HF Test Successful Criteria, completion documents (Suggested)

Testing Status Logs

Complete a log entry for each test.

6. Indicate test Number
7. Indicate appropriate configuration

For any test that does not pass attach complete descriptions of situation.

8. Test made
9. Set up of all equipment involved
10. Enclose test result collected
11. Resolutions attempted and results
12. All other pertinent information for future analysis
13. Complete additional log entries for each new attempt at completing failed tests

Return copy and results to appropriate organization

Make as many additional copies of the form as needed for all tests executed

Test No.		LSP TSTR	SCNRO DATE	GO NOGO
COMMENTS:				

Test No.		LSP TSTR	SCNRO DATE	GO NOGO
COMMENTS:				

Test No.		LSP TSTR	SCNRO DATE	GO NOGO
COMMENTS:				

Test No.		LSP TSTR	SCNRO DATE	GO NOGO
COMMENTS:				

APPENDIX IG Related documents (i.e. NIIF, Interoperability Issues, status)

Wireless Portability Technical Operational and implementation Documents

APPENDIX JH Glossary of Terms

ALI	Automated Location Identification
ANI	Automatic Number Identification
ANSI	American National Standard Institute
CAC	Carrier Access Code
CCS	Common Channel Signaling
CDR	Call Detail Record
CPN	Calling Party Number
CSD	Circuit Switched Data
CSV	Circuit Switched Voice
DN	Directory Number
FOC	Firm Order Commitment

IC	Interexchange Carrier
ICP	Inter carrier Communication Process
IP	Intelligent Peripheral
ISDN	Integrated Services Digital Network
ISP	Incumbent Service Provider
ISUP	ISDN User Part
ISVM	Interswitch Voice Messaging
IVR	Interactive Voice Response Unit
IXC	Interexchange Carrier
JIP	Jurisdiction Information Parameter
LATA	Local Access Transport Area
LEC	Local Exchange Carrier
LERG	Local Exchange Routing Guide
LIDB	Line Identification Database
LNP	Local Number Portability
LRN	Location Routing Number
LSMS	Local Service Management System
LSR	Local Service Request
LTI	Low Tech Interface
MSC	Mobile Switching Center
MDN	Mobile Directory Number
MIN	Mobile Identification Number
NANC	North American Numbering Council
NANP	North American Number Plan
NENA	National Emergency Number Association
NPREQ	Number Portability Request
NP	Number Portability
NPA	Numbering Plan Area
NPAC	Number Portability Administration Center
NRA	Network Routing Address (LRN)
NSP	New Service Provider
NXX	Office Code
OSP	Old Service Provider
OSPS	Operator Services Position System
P-ANI	Pseudo Automated Number Identification
PIC	Pre-subscribed Interexchange Carrier
PSAP	Public Safety Answering Point
SOA	Service Order Activation
SP	Service Provider
SPID	Service Provider Identity
SS7	Signaling System 7
SSP	Service Switching Point
SV	Subscriber Version
TN	Telephone Number
WPR	Wireless Port Request

Automatic Number Information:

Telephone number associated with the access line from which a call originates.

Competitive Local Exchange Carrier (CLEC):

A telecommunications company that has obtained FCC certification to sell local exchange services in a specific geographical territory.

Conditional Trigger:

The trigger is encountered after additional criteria is satisfied.

Donor Switch:

The switch from which a DN was originally ported. More specifically, the switch that is considered the default destination for the NPA-NXX of the DN.

End-User:

Business or residential subscriber.

Global Title (GT)

A ”logical” or “virtual” address used for routing SS7 messages using the Signal Control Connection Part (SCCP) capabilities. To complete message routing, a GTA must be converted to a SS& point code and subsystem number.

Global Title Address (GTA)

The address digits contained in the GT. Examples include NPA-NXX, a DN or an LRN.

Global Title Translations(GTT):

Process by which a GT is converted either into a SS7 point code and subsystem number (final GTT) or another SS7 destination which will perform the GTT (non-final GTT or final GTT).

Incumbent Local Exchange Carrier (ILEC):

Local exchange service provider that has traditionally served a specific geographical territory.

Intermediate Switch:

A tandem switch.

LATA:

A defined geographic area where equal access switches or access tandem switches can provide carrier access to the local switch.

Local Exchange Carrier Routing:

An intra LATA route where the route does not involve an inter exchange carrier. For this case, an IXC is neither dialed nor pre-subscribed. Typically, Feature Group-C signaling is used for sending the call out of the office.

Local Exchange Routing Guide:

Contains information about he local routing data obtained from the Routing Data Base System (RDBS). This information reflects the current network configuration and scheduled network changes for all entities originating or terminating calls within the NANP.

N-1 Network:

The network in the call path just prior to the terminating network. If there are only two networks in the call path, then the N-1 network is the originating network. In the case of an inter-Lata call, the next to last network is the interexchange carrier network.

Network Element (NE):

Entities of the telecommunications network that primarily provide switching and transport network functions. For example: switching systems, AIN switching systems, digital cross-connect systems, and Signaling Transfer Points.

North American Numbering Plan:

A numbering architecture in which every station in the NANP area is identified by a unique ten-digit address consisting of a three digit NPA code, a three-digit central office code in the form of NXX, and a four-digit number in the form of XXXX..

Number Portability:

The ability of end users to retain their telephone number when they change any of the following: their location, service provider, or service.

Number Portability Data Base (NPDB):

A generic term for the network element that runs the number portability application.

Number Portability (NP) Query:

A request for call routing information sent from the switch to the NPDB when a call encounters an NP trigger. (i.e. AIN or IN or (NPREQ).

Number Portability Information:

Information associated with a ported DN used by AMA recording to identify the recipient switch (via LRN), of the ported DN to assist in billing.

Originating Switch:

The switch serving the calling party.

Portable NPA-NXX:

An NPA-NXX designated as "open" for portability. NO numbers may have actually ported.

Ported Number:

A DN in a portable NPA-NXX that resides on a switch other than the switch to which it is assigned in the LERG.

Rate Center:

A rate center denotes a geographic area used to distinguish rate boundaries for Wireline companies.

Recipient Switch:

The switch to which the DN is ported.

Terminating Switch:

The switch in which the call terminates.

Trigger:

An event in the originating switch which launches the query to the NPDB to determine if the called number is a ported number.

Exit Criteria (expected results):

Defines what the acceptable parameters to consider the test as pass or fail.

Portable Number:

A Directory Number (DN) that is part of a ported range from which one or more DN's may have been ported.

Ported Number:

A DN that has been ported from one service provider to another. A ported number is also a portable number.

X, Y Coordinates:

New capability to identify geographic location for 911 calls