APPENDIX F

Networx Enterprise Program

Contract Number TQC-JTB-05-0002

Operational Support Systems (OSS) Verification Test Plan

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TABLE OF CONTENTS

1.0 Introduction 1
1.1 Scope 1
1.2 Organization of Document 1a
1.3 Program Overview 2
1.4 OSS Verification Test Purpose 2a
1.5 Reference Documents 5
2.0 Management and Test Planning 6
2.1 Management 6
2.2 Requirements 7
2.3 Approval and Updates 7
2.4 Schedule 8
2.5 Test Strategy 10
2.6 Test Cases 11
2.7 Results 12
3.0 Conduct of Tests and Verification of Results 13
3.1 Test Preparation 13
3.2 Test Case 1: Discrete Order Acceptance 13a
3.2.1 Connect 13a
3.2.2 Login 13b
3.2.3 Verify Inventory Data 13c
3.2.4 Order Communications Transport Services (CTS) 13c
3.2.5 Order IP-Based Services (IPS) 13c
3.2.6 Order Optical Based Services (OBS) 13d
3.2.7 Order Special Services (SPS) 14
3.2.8 Order Wireless Services (WLS) 14

3.2.9 Order Management and Application Services (MAS)..... 14
3.2.10 Order Security Services (RTS)..... 14
3.2.11 Logoff..... 15
3.3 Test Case 2: Obtain and Verify Service Order Notices..... 16
3.3.1 Order Receipt Acknowledgement (ORA) Verification..... 16
3.3.2 Service Order Confirmation (SOC) Verification..... 16
3.3.3 Firm Order Commitment Notice (FOCN) Verification..... 16a
3.3.4 Service Order Completion Notice (SOCN) Verification..... 16a
3.4 Test Case 3: Bulk Ordering..... 16a
3.4.1 Connect..... 16b
3.4.2 Login..... 17
3.4.3 Verify Inventory Data..... 17
3.4.4 Order Communications Transport Services (CTS)..... 17
3.4.5 Order IP-Based Services (IPS)..... 17
3.4.6 Order Optical Based Services (OBS)..... 17
3.4.7 Order Management and Applications Services (MAS)..... 17a
3.4.8 Order Security Services (RTS)..... 17a
3.4.9 Order Special Services (SPS)..... 17a
3.4.10 Order Wireless Services (WLS)..... 18
3.4.11 Bulk Order Output..... 18
3.4.12 Logoff..... 18
3.5 Test Case 4: Inventory..... 18
3.5.1 Connect..... 18
3.5.2 Login..... 18a
3.5.3 Verify Inventory..... 18a
3.5.4 Logoff..... 18a
3.6 Test Case 5: Billing..... 19
3.6.1 Connect..... 19

3.6.2 Login 19
3.6.3 Verify Billing 19
3.7 Test Case 6: Security 19
3.7.1 Invalid User Verification 19
3.7.2 Invalid Password Verification 19
3.7.3 Authorization Verification 19a
3.7.4 Service Authorization 20
3.8 Test Close Out and Reporting 20

Attachment A: Requirements 21

A. Verification Testing of Contractor's Operational Support Systems 22

Attachment B: Order attributes 25

B. Test Procedure and Order Attributes 26

Attachment C: OSS Verification Test AGENDA (SAMPLE) 30

Agenda: 32
OSS Test Preparation 32
OSS Verification Test 33

Attachment D: OSS Verification Test Results Report 35
OSS Verification Test Results 36

Attachment E: OSS Verification Test Schedule 39

LIST OF FIGURES

Figure 1.4.1: Networx Test Cases demonstrate OSS for the Government. 4
Figure 2.4.1: OSS Verification Test Plan Review and Update Schedule. 9
Figure 2.4.2: OSS Verification Test Process Flow 10
Figure 3.2.1.1: **Business**Direct Home Page..... 13b
Figure 3.1.2.1: **Business**Direct Log In Window.....13c

LIST OF TABLES

Table 2-1: Reference Documents 5
Table A-1*: OSS Verification Test Cases.* 24
Table B-1: Test Procedure Template. 26
Table B-2: Key to Superscripts. 26
Table B-3: A test procedure template will be developed for each of the following services ordered. 27
Table D-1: OSS Verification Test Results. 38
Table E-1: OSS Verification Test Schedule. 42

APPENDIX F

1.0 INTRODUCTION

The Networx Operational Support Systems (OSS) Verification Test Plan described below will be used to demonstrate AT&T's OSS readiness for the Networx Enterprise contract. All services offered by AT&T will be tested, including optional services, in accordance with the RFP requirements. The list of mandatory and optional services to be ordered during testing is documented in the detailed test procedures.

1.1 Scope

The OSS Verification Test Plan describes AT&T's approach to performing the six OSS Verification Test Cases as outlined in Table E.3.1 and successfully demonstrating the capabilities of our OSS to meet the requirements of the Networx RFP. Included in the plan are several recommendations for performing the OSS Verification Tests in an expedient, yet thorough manner:

- AT&T understands that the Government may provide test data for the OSS Verification Test and we will be ready to accept the Government's data. Comprehensive and accurate detailed service data was provided to the Government by AT&T with our proposal submission in the Data Dictionary Sample Data. This same data will be used by AT&T for our own internal OSS Verification Tests that we will perform prior to award. This data may be corrected or enhanced during that testing. If so, revised sample data will be provided to the Government in our revised test plan post-award. To avoid potential delays due to erroneous data, AT&T recommends using this same sample data for the final OSS Verification Test.

- AT&T understands that the Government has the right to observe all or any part of the OSS Verification Test. We developed a test plan that engages the Government throughout every test case and provides the Government with AT&T OSS application overviews. On-site testing allows the Government to further verify all aspects of the Networx applications designed specifically for them and the Agencies.
- AT&T has developed a sample testing Agenda (Attachment C) that strives to lessen the on-site time required by the Government while still allowing the Government to observe the performance of each test case and fully complete all six required test cases.

1.2 Organization of Document

This document is organized as follows:

Section 1 – Introduction

Section 1 provides the scope and organization of this test plan, the Networx program overview, the purpose of the OSS Verification Test plan, and the applicable contract baseline documents.

Section 2 – Management and Test Planning

Section 2 provides overall planning for the OSS Verification Testing activities.

Section 3 – Conduct of Tests and Verification of Results

Section 3 provides the procedures to be followed to conduct the test steps and report the results of the OSS Verification Test.

Attachment A Requirements

Attachment A presents the RFP sections germane to this plan and the corresponding paragraph in this test plan which responds to each section.

Attachment B Order Attributes

Attachment B presents the service types and the order attributes.

Attachment C OSS Verification Test Sample Agenda

Attachment C presents the Assumptions, Test Variables, AT&T parameters and a sample OSS Verification Test Agenda.

Attachment D OSS Verification Test Results Report

Attachment D presents the OSS Verification Test Results Report to be delivered to the Government after the OSS Verification Test

Attachment E Detailed OSS Verification Test Schedule

Attachment E presents a typical schedule used for OSS Verification Testing

1.3 Program Overview

The Networx contract is designed to provide Government users with up-to-date, cost-effective, and easy to use telecommunications and information technology services. The FTS Networx acquisition provides authorized users with the full range of telecommunications products, management and application services, security services, wireless services, special services, and solutions necessary to support their missions. GSA and Agencies will reliably and confidently fulfill their critical missions through use of AT&T's integrated Operational Support Systems (OSS). These technologically sound support systems are in place to support the Government for ordering, billing, inventory management, service management, customer support and overall program management.

1.4 OSS Verification Test Purpose

OSS Verification Testing assures the Government all support systems (e.g., service ordering, billing, and inventory management systems) essential to provisioning, operating, and maintaining each new service are in place, tested, and approved. The verification testing is completed within 60 calendar days after approval of the test plan by GSA or within 60 days after receipt of the Notice to Proceed, whichever is later. The OSS Verification tests consist of six Test Cases as listed in Attachment A, Table E.3.1, and OSS Verification Test Cases.

The OSS Verification Test activities to be accomplished are as follows:

- Baseline values for attributes associated with mandatory and non-mandatory service orders are obtained using secure Web queries in

accordance with RFP section C.3.8.2.4. The results of the queries are stored and may be retrieved as needed.

- An order is entered for each of the mandatory and non-mandatory services using data provided by the Government (or the AT&T sample data if the Government prefers).
- The order acknowledgements received for each of the mandatory and non-mandatory services ordered are reviewed to verify that they are consistent with the orders presented.
- A second set of attribute values for the inventory of Networx service orders entered are obtained using secure Web queries in accordance with RFP section C 3.8.2.4. The results of the queries are stored and are retrievable. The second set of attribute values is compared to the original set of attribute values to verify that the attribute values have been updated correctly based upon the discrete orders entered.
- Entry of bulk orders for each of the services using data provided by the Government. A third new set of attribute values for the inventory of Networx service orders entered obtained using secure Web queries in accordance with RFP section C.3.8.2.4. The results of the queries are stored and are retrievable. The third set of attribute values are compared to the second set of attribute values to verify that the attribute values have been updated correctly based upon the bulk orders entered.
- Reports are produced by the billing system. The reports are reviewed to verify the billing system files are consistent with the discrete and bulk orders entered, the billing data elements meet RFP Sections J.12.4, J.12.4.1 and J.12.4.2, the charges accurately reflect the orders entered, and the charges have been assigned in a manner that is consistent with the Agency Hierarchy Codes (AHC).

- Attempts are made to access the OSS using identities not present in the system as authorized users, using passwords not associated with an authorized user identity, and using valid identities with correct password to attempt to access information for which the identity does not have authority to access. These attempts should fail.

The OSS Verification Test cases include details and steps to provide GSA and Agencies with the assurances that all OSS are in place and fully operational. The test case process is summarized in **Figure 1.4.1**.

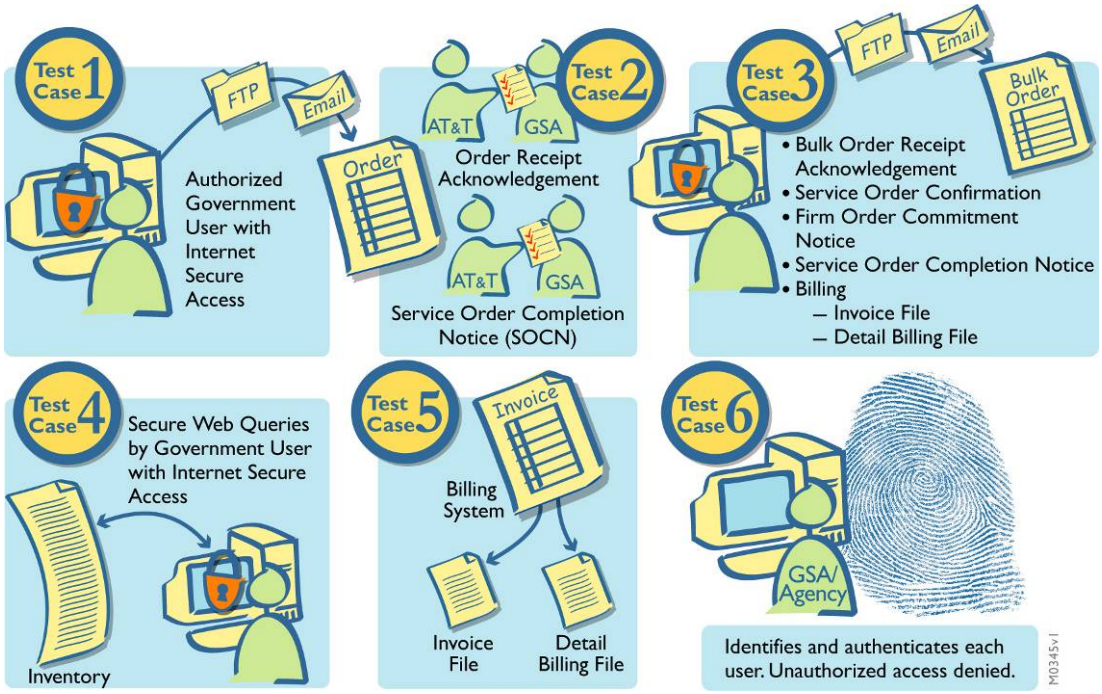


Figure 1.4.1: Networx Test Cases demonstrate OSS for the Government. *The Government will see AT&T's ability to process orders, produce acknowledgements, update inventory, and bill for Networx services with the OSS Verification Test.*

1.5 Reference Documents

The versions and dates of publication of these applicable reference documents (**Table 2-1**) are given for completeness and are not intended to unduly constrain the scope of this document. If required, AT&T and the Government will mutually agree upon changes to be applied to this document, due to changes in the reference documents.

DOCUMENT	AUTHOR	DATE
RFP Networx Enterprise	GSA	May 6, 2005
RFP Networx Enterprise Amendment #1	GSA	June 22, 2005
RFP Networx Enterprise Amendment #2	GSA	August 19, 2005
RFP Networx Enterprise Amendment #3	GSA	September 23, 2005
RFP Networx Enterprise Amendment #4	GSA	September 28, 2006
RFP Networx Enterprise Amendment #5	GSA	June 9, 2006
RFP Networx Enterprise Amendment #6	GSA	August 14, 2006
RFP Networx Enterprise Amendment #7	GSA	December 23, 2006
RFP Networx Enterprise Amendment #8	GSA	February 1, 2007

Table 2-1: Reference Documents.

2.0 MANAGEMENT AND TEST PLANNING

This document presents the plan for verifying the operation of the OSS is in compliance with the requirements.

2.1 Management

The OSS Verification Test team is managed by the OSS Verification Test Manager within the Networx Customer Support Office (CSO) who devises the test planning process, maintains the test schedule, staffs the test team, organizes the team, directs and facilitates the team's activities, and coordinates team actions. The OSS Verification Test Manager communicates with senior management and the Government staff on status, schedules, results, risks, and action items.

The test team initially could have as many as six dedicated members: the OSS Verification Test Manager, one senior tester, and three to four mid-level testers. Personnel involved in creating and maintaining the OSS and performing the ordering functions in the care center will also be involved in the Verification Tests. Staffing may not remain constant over the life of the contract due to changes in test requirements and test cycles as the Networx program progresses. The OSS Verification Test Manager will acquire and release personnel as necessary to maintain the appropriate number of personnel with the requisite skills for each phase of the program.

Individual team members, subteams, and the full team are assigned tasks and responsibilities by the OSS Verification Test Manager such that the defined purpose, goals, and objectives of OSS Verification Tests are successfully accomplished.

The OSS Verification Test Manager's responsibilities include the following tasks and functions:

- Communicate with team members and observe the testing activities and processes followed to assess whether the tasks are being performed in the correct sequence
- Provide information and direction to team members to facilitate coordinated activities and a collaborative test phase

- Monitor the activities of individual team members, sub-teams, and the full team to make sure testing is being accomplished in accordance with the OSS Verification Test Plan and other guiding documents and requirements.
- Proactively recognize issues and make sure that corrective actions are taken to achieve the purpose of the verification tests.
- Develop and implement suitable corrective actions to provide complete and consistent processes.

2.2 Requirements

The OSS Verification Test Plan has been prepared in accordance with the requirements in the Networx Request for Proposal (RFP), Section C.3.9, Operational Support Systems (OSS), and Section E.3, Verification Testing of the Contractor's Operational Support Systems.

The OSS Verification tests demonstrate that the OSS meets the acceptance criteria in **Table E.3-1**, OSS Verification Test Cases – Acceptance Criteria, of Section E of the Networx Request for Proposal.

2.3 Approval and Updates

The OSS Verification Test Plan is provided to the Government for review and approval. Testing must be conducted using the approved test plan. The OSS Verification Test Plan is updated (if required) each time a new service is offered or OSS changes are implemented. AT&T understands that the Government may request that we perform and meet the acceptance criteria in Table E.3-1 each time a new service is offered or the OSS is modified. As this occurs, the OSS Verification Test Plan will be modified to include the process for incorporating Government review and approval of changes to the plan after initial testing.

The test planning process is a continuing and ongoing activity throughout the contract as the factors that affect plans change over time. Plans must adapt to meet the changes in demands. Changes to the test plan will be controlled according to the AT&T [redacted] Project Change Control process. Modification Requests (MRs) are submitted, tracked, reviewed, implemented,

and closed by the Modification Request Review Board (MRRB). The MRRB participates in and provides input to the change management process.

The OSS Verification Test Plan is reviewed periodically in accordance with the [redacted] guidelines. The [redacted] AT&T Project Management methodology for software and systems services. The [redacted] framework provides a disciplined approach to development and management of complex services, proven quality processes and principles, consistent data for making business and project decisions, and uniform metrics for assessing effectiveness.

2.4 Schedule

The OSS Verification Test Plan is submitted to the Government for review upon Contract Award. The Government has up to 15 days to reject the test plan. The Government provides comments on the plan and AT&T has up to 10 days to remedy the deficiencies in the test plan identified by the Government review. During this 10-day period, the Government provides the test data required for the discrete and bulk orders. The Government may choose to use the sample data from the Data Dictionary provided by AT&T. **Figure 2.4.1** depicts the OSS Verification Test Plan approval process. AT&T resubmits the revised test plan to the government for additional reviews lasting up to 15 days and has up to 10 days to remedy deficiencies in the test plan. This 25-day cycle may be repeated until the test plan is approved by the Government.

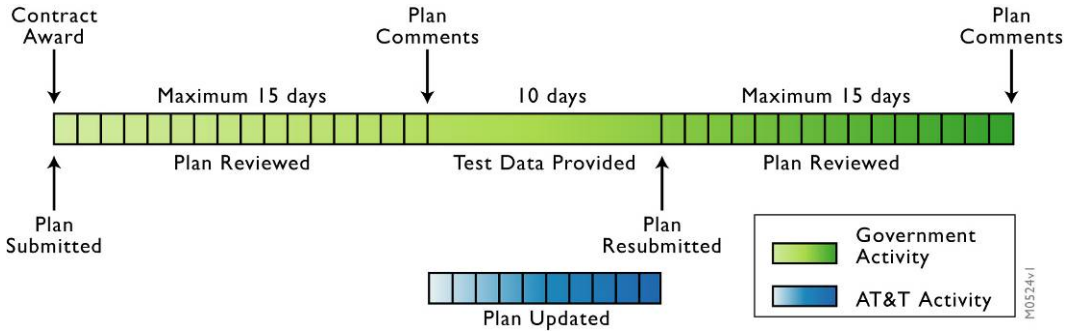


Figure 2.4.1: OSS Verification Test Plan Review and Update Schedule. *AT&T understands and complies with the approval process and deadlines.*

The OSS Verification Test must be completed within 60 calendar days after GSA approves the plan or within 60 calendar days after Notice to Proceed, whichever is later.

If the Government requests, the OSS Verification Test Plan will be executed and the acceptance criteria will be met each time a new service is offered or OSS changes are implemented.

The sample OSS Verification Test Agenda in Attachment C and the detailed OSS Verification Test Schedule in Attachment E outline the various test activities that will occur during the OSS verification test phase. Actual dates and durations will be further defined after the test plan is approved.

Figure 2.4.2 shows the OSS Verification Test Process Flow that corresponds with the schedule.

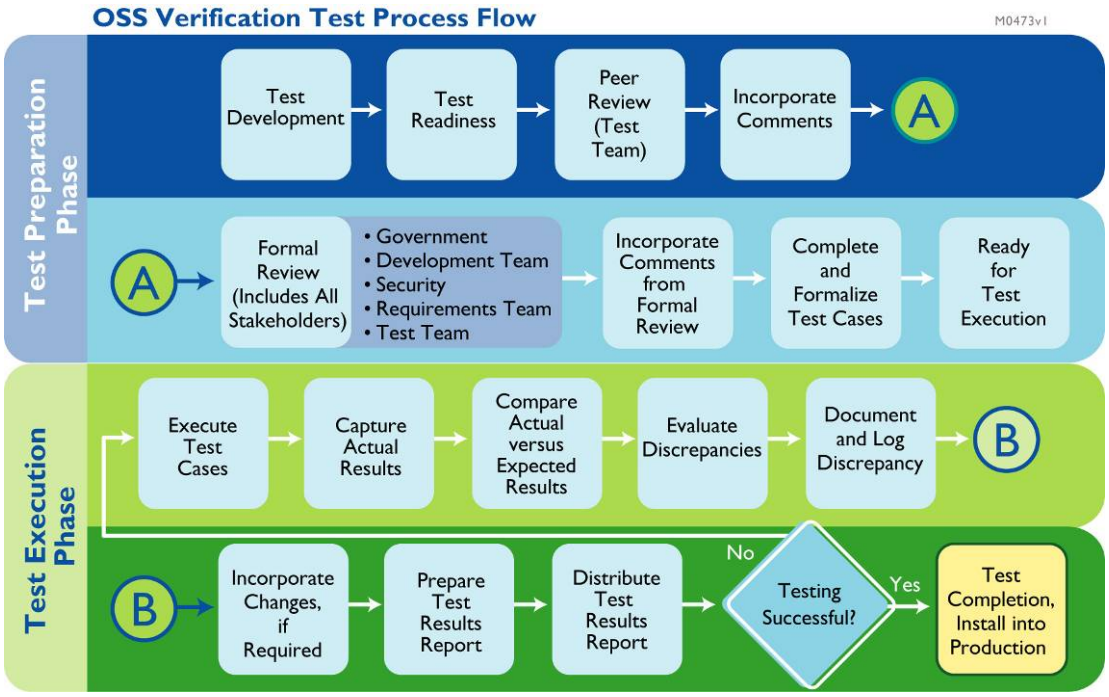


Figure 2.4.2: OSS Verification Test Process Flow. *To confirm operation of OSS prior to services being ordered, the OSS Verification Test Process is thorough and complete.*

2.5 Test Strategy

To facilitate a quick and efficient OSS Verification Test, the sample data provided with the Data Dictionary Package can be used as a starting point. This benefits the Government by eliminating the need for additional resources to create test data, ultimately resulting in a shorter completion time for the test. In addition, because the Government is familiar with this data and has processed it through their own systems, it can facilitate a faster turnaround for executing test cases and capturing actual results. The Government can benefit from being on site during the test by being able to utilize the Networx applications developed specifically for them. They will be able to work directly with AT&T throughout the test and will have immediate access to the Subject Matter Experts (SMEs).

2.6 Test Cases

The OSS Verification Test proves, through a series of test cases, that the OSS performs required functions in support of order acceptance, receipt acknowledgement, and service order completion notices for each of the services offered both for single orders and bulk orders. The OSS

Verification Test verifies, through a series of test cases, that the OSS achieves the following results:

- Accepts the required Networx ordering attributes
- Manages data about the inventory of Networx services
- Generates billing invoices and detailed billing statements that are consistent with the data entered for the test cases and with the Agency Hierarchy Code (AHC)
- Only permits properly identified and authenticated users to have access to the limited set of information they are authorized to access.

2.7 Results

The OSS Verification Test procedures include the pre-defined expected outcome and recording of the actual test results. Test results include the "before" and "after" order inventory reports produced during the test phase. Test results are included for the billing and detailed billing reports. Test results for security requirements will be demonstrated by presentation of screenshots captured during the execution of the defined test procedures.

A summary level OSS Verification Test Results Report is prepared and distributed at the conclusion of the test. For each test case and for each run, a status is indicated with a pass or fail. An example of the OSS Verification Test Results Report is included in Attachment D.

The OSS Verification Test results are archived in softcopy for a minimum of two years and any archived results requested by GSA are available online to authorized Government users.

3.0 CONDUCT OF TESTS AND VERIFICATION OF RESULTS

To assist GSA in their planning process, a sample OSS Verification Test Agenda outlining the details and timeframes for the various test cases is included in Attachment C.

3.1 Test Preparation

Before initiating the OSS Verification Tests, AT&T must prepare the test environment for the Government. Part of this preparation phase includes obtaining data from the Government. To assist in test preparation and set up, the Government will need to provide:

- OSS Verification Test Data (if not using AT&T's sample data)
- Test Agency Administrator name
- Test Designated Agency Representative (DAR) names
- List of services each test DAR is authorized to order
- Agency Hierarchy Codes (AHCs) if specific codes are required, otherwise, AT&T will prepare a test hierarchy structure

AT&T will take this information and perform the required account set up for the test. AT&T will establish the AHC (s) in our system and add the Agency account information into the [redacted] Once this is complete, [redacted] will be assigned and the Agency profile will be established in **Business**Direct. **Business**Direct IDs will be created for the test DARs with various permission sets, i.e. only able to order certain services or only able to access billing information.

3.2 Test Case 1: Discrete Order Acceptance

In this document, AT&T has used the term test DAR to describe the Government user who will be performing order input and the related OSS Verification Test tasks. Depending upon the Government's schedule for completing the test, the Government can have multiple test DARs performing orders simultaneously. AT&T can assist the Government by accommodating multiple testing resources so orders for various service types can be submitted concurrently.

In accordance with RFP requirements, AT&T has chosen the electronic media of "internet secure access" to perform our tests. Although the steps below highlight each of the Networx Service Types, a separate order will be processed for each service offered by AT&T within that Service Type.

3.2.1 Connect

Connect to the secure internet web service, AT&T **Business**Direct URL: www.businessdirect.att.com.

Figure 3.2.1-1: BusinessDirect Home Page. *Government users will be given a valid ID and password to use for performing the OSS Verification Test Cases.*

3.2.2 Login

Login to AT&T **Business**Direct, using the user identity and password of an authorized user.

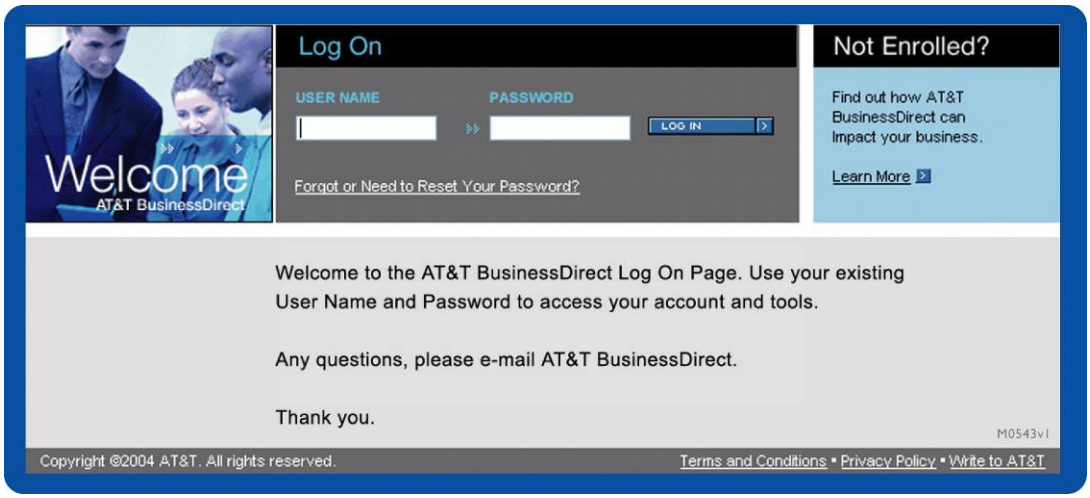


Figure 3.2.2-1: BusinessDirect Log In Window. *Government users will use their valid ID and password to gain access to the ordering, inventory and billing applications.*

3.2.3 Verify Inventory Data

Select the [redacted] application from the **Business**Direct home page. Query the test account inventory records. Note that the inventory is blank and does not yet include the test order data. Print the report and mark as the “before” inventory.

3.2.4 Order Communications Transport Services (CTS)

Select [redacted] from the **Business**Direct homepage.

Select Networx and select the Communications Transport Service (CTS) you want to order from the drop down box. Complete the required order entry fields, print the screens for later verification, and submit the order. Separate orders will need to be processed for each service. Repeat this process for each CTS service. Attachment B lists the specific services.

3.2.5 Order IP-Based Services (IPS)

Select [redacted] from the **Business**Direct homepage.

Select Networx and select the IP-Based Service (IPS) you want to order from the drop down box. Complete the required order entry fields, print the screens for later verification, and submit the order. Separate orders will need to be processed for each service. Repeat this process for each IPS service. Attachment B lists the specific services.

3.2.6 Order Optical Based Services (OBS)

Select [redacted] from the **Business**Direct homepage.

Select Networx and select the Optical Based Service (OBS) you want to order from the drop down box. Complete the required order entry fields, print the screens for later verification, and submit the order. Separate orders will need to be processed for each service. Repeat this process for each OBS service. Attachment B lists the specific services.

3.2.7 Order Special Services (SPS)

Select [redacted] from the **Business**Direct homepage.

Select Networx and select the Special Service (SPS) you want to order from the drop down box. Complete the required order entry fields, print the screens for later verification, and submit the order. Separate orders will need to be processed for each service. Repeat this process for each SPS service. Attachment B lists the specific services.

3.2.8 Order Wireless Services (WLS)

Select [redacted] from the **Business**Direct homepage.

Select Networx and select the Wireless Service (WLS) you want to order from the drop down box. Complete the required order entry fields, print the screens for later verification, and submit the order. Separate orders will need to be processed for each service. Repeat this process for each WLS service. Attachment B lists the specific services.

3.2.9 Order Management and Application Services (MAS)

Select [redacted] from the **Business**Direct homepage.

Select Networx and select the Management and Application Service (MAS) you want to order from the drop down box. Complete the required order entry fields, print the screens for later verification, and submit the order. Separate orders will need to be processed for each service. Repeat this process for each MAS service. Attachment B lists the specific services.

3.2.10 Order Security Services (RTS)

Select [redacted] from the **Business**Direct homepage.

Select Networx and select the Security Service (RTS) you want to order from the drop down box. Complete the required order entry fields, print the screens for later verification, and submit the order. Separate orders will need to be processed for each service. Repeat this process for each RTS service. Attachment B lists the specific services.

3.2.11 Logoff

Log out of AT&T **Business**Direct.

3.3 Test Case 2: Obtain and Verify Service Order Notices

In the RFP requirements for Test Case 2, the Government has requested verification of the Order Receipt Acknowledgement (ORA) and Service Order Completion Notice (SOCN). AT&T plans on also providing and verifying the Service Order Confirmation (SOC) and the Firm Order Commitment Notice (FOCN).

Log into **Business**Direct and access the [redacted] application. Perform a query to obtain the notice information for the test account. Access the ORA, SOC, FOCN, and SOCN for each order submitted into [redacted] in Test Case 1. Print each of the notices to compare to Inventory data.

3.3.1 Order Receipt Acknowledgement (ORA) Verification

Go into [redacted], using queries, pull-up the Order Receipt Acknowledgement for each order submitted. Verify that the ORA for each order submitted contains the required data elements and correct values as specified in RFP J.12.2.1, Unit 1: Order Receipt Acknowledgement. Compare the ORA to the print-outs of the orders created in Test Case 1.

3.3.2 Service Order Confirmation (SOC) Verification

Go into [redacted], using queries, pull-up the Service Order Confirmation for each order submitted. Verify that the SOC for each order submitted contains the required data elements and correct values

as specified in RFP J.12.2.2, Unit 2: Service Order Confirmation. Compare the SOC to the print-outs of the orders created in Test Case 1.

3.3.3 Firm Order Commitment Notice (FOCN) Verification

Go into [redacted]

Firm Order Commitment Notice (FOCN). Verify that the FOCN for each order submitted contains the required data elements and correct values as specified in RFP J.12.2.4, Unit 4: Firm Order Commitment Notice. Compare the ORA to the print-outs of the orders created in Test Case 1.

3.3.4 Service Order Completion Notice (SOCN) Verification

Go into [redacted]

Service Order Completion Notice (SOCN) for each order submitted. Verify that the SOCN for each order submitted contains the required data elements and correct values as specified in RFP J.12.2.5, Service Order Completion Notice (SOCN). Compare the SOCN to the print-outs of the orders created in Test Case 1.

3.4 Test Case 3: Bulk Ordering

Bulk orders are entered for each service ordered as specified in the RFP. Testing will be done with Government provided data or data provided by AT&T that is similar to the Data Dictionary Sample Data. For Bulk Ordering, AT&T recommends testing high volume services that most commonly use the bulk ordering process, such as Calling Card services. This will save the Government time and resources spent on the OSS Verification Test.

3.4.1 Connect

Connect to the secure internet web service, AT&T **Business**Direct URL: www.businessdirect.att.com.

3.4.2 Login

Login to AT&T **Business**Direct, using the user identity and password of an authorized user.

3.4.3 Verify Inventory Data

Select the [redacted] application from the **Business**Direct home page. Query the test account inventory records. Note that the inventory is blank and does not yet include the test order data. Print the report and label as the “before” inventory.

3.4.4 Order Communications Transport Services (CTS)

Select [redacted] from the **Business**Direct home page. Select Networx and select the Communications Transport Service (CTS) you want to order from the drop down box. Complete the required order entry fields, print the screens for later verification, and submit the order. Separate orders will need to be processed for each service. Repeat this process for each CTS service bulk order.

3.4.5 Order IP-Based Services (IPS)

Select [redacted] From the **Business**Direct home page. Select Networx and select the IP-Based Service (IPS) you want to order from the drop down box. Complete the required order entry fields, print the screens for later verification, and submit the order. Separate orders will need to be processed for each service. Repeat this process for each IPS service bulk order.

3.4.6 Order Optical Based Services (OBS)

Select [redacted] from the **Business**Direct home page. Select Networx and select the Optical Based Service (OBS) you want to order from the drop down box. Complete the required order entry fields, print the screens for

later verification, and submit the order. Separate orders will need to be processed for each service. Repeat this process for each OBS service bulk order.

3.4.7 Order Management and Applications Services (MAS)

Select [redacted] from the **Business**Direct home page. Select Networx and select the Management and Applications Service (MAS) you want to order from the drop down box. Complete the required order entry fields, print the screens for later verification, and submit the order. Separate orders will need to be processed for each service. Repeat this process for each MAS service bulk order.

3.4.8 Order Security Services (RTS)

Select [redacted] from the **Business**Direct home page. Select Networx and select the Security Service (RTS) you want to order from the drop down box. Complete the required order entry fields, print the screens for later verification, and submit the order. Separate orders will need to be processed for each service. Repeat this process for each RTS service bulk order.

3.4.9 Order Special Services (SPS)

Select [redacted] from the **Business**Direct home page. Select Networx and select the Special Service (SPS) you want to order from the drop down box. Complete the required order entry fields, print the screens for later verification, and submit the order. Separate orders will need to be processed for each service. Repeat this process for each SPS service bulk order.

3.4.10 Order Wireless Services (WLS)

Select [redacted] from the **Business**Direct home page. Select Networx and select the Wireless Service (WLS) you want to order from the drop down box. Complete the required order entry fields, print the screens for later verification, and submit the order. Separate orders will need to be processed for each service. Repeat this process for each WLS service bulk order.

3.4.11 Bulk Order Output

Select the [redacted] application and using queries access the notices for the bulk orders processed. Verify that the following bulk order output products are generated and contain accurate data. Compare the following notices to the print-outs of the orders created in Test Case 3:

- Order Receipt Acknowledgement (ORA)
- Service Order Confirmation (SOC)
- Firm Order Commitment Notice (FOCN)
- Service Order Completion Notice (SOCN)

Print notices to compare to Inventory data. The output generated indicates a single Agency Service Request Number.

3.4.12 Logoff

Log out of AT&T **Business**Direct.

3.5 Test Case 4: Inventory

3.5.1 Connect

Connect to the secure internet web service, AT&T Business Direct URL: www.businessdirect.att.com.

3.5.2 Login

Login to AT&T **Business**Direct, using the user identity and password of an authorized user.

3.5.3 Verify Inventory

Select [redacted] *Notices* from the **Business**Direct home page. Access the test account. Using queries, pull up the Inventory data for each of the service orders processed in Test Cases 1 and 3. Compare the inventory to the notices viewed in Test Case 2. Verify that the services ordered are represented accurately by comparing the original service order print-out to the notice to the inventory record. Repeat for each service order processed. Print Inventory screens for comparison to Billing records.

3.5.4 Logoff

Log out of AT&T **Business**Direct.

3.6 Test Case 5: Billing

3.6.1 Connect

Connect to the secure internet web service, AT&T Business Direct URL: www.businessdirect.att.com.

3.6.2 Login

Login to AT&T **Business**Direct, using the user identity and password of an authorized user.

3.6.3 Verify Billing

Select [redacted] from the **Business**Direct home page. Access the test account and the desired AHC. Verify that the Billing Invoice and Detail Billing File contains valid data by checking that required fields (RFP J.12.4) are present and contain the proper values based upon the discrete and bulk orders entered in Test Cases #1 and #3. Compare billing data to inventory data print-outs.

3.7 Test Case 6: Security

3.7.1 Invalid User Verification

Attempt to login to the secure internet web service, AT&T **Business**Direct URL: www.businessdirect.att.com using a user ID that is not in the system. The system prohibits login to the user.

3.7.2 Invalid Password Verification

Attempt to login to the secure internet web service, AT&T **Business**Direct URL: www.businessdirect.att.com using a user ID that is in the system and a password other than the password that is associated with that user ID. The system will not allow the user to login.

3.7.3 Authorization Verification

Login to the secure internet web service, AT&T **Business**Direct URL: www.businessdirect.att.com as a user with limited authorizations.

Perform a function that accesses data for which the user is authorized. The user is able to complete the function. Attempt to perform a function that would access data for which the user is not authorized. The user is not able to perform the function (i.e., access the data). Logoff. The user is no longer connected. Click the browser back button. The user cannot regain entry into the system. Access the history, select the last URL, and make sure the user cannot gain entry into the system.

3.7.4 Service Authorization

Login to the secure internet web service, AT&T **Business**Direct URL: www.businessdirect.att.com as a user with has limited Networx service authorization.

The user performs an ordering function that attempts to order data for which the user is authorized. The user is able to complete the order. Attempt to perform an order for a service that the user is not authorized to order. The user is not able to order the service. Logoff. The user is no longer connected. Click the browser back button. The user cannot regain entry into the system. Access the history, select the last URL, and make sure the user cannot gain entry into the system.

3.8 Test Close Out and Reporting

Actual results will be recorded and reviewed to determine if they meet the expected results. When the actual results differ, a discrepancy report will be logged. The discrepancy will be reviewed by the stakeholders to make sure the issue is clearly defined and corrective action can occur. After the corrective action has occurred, the test case will be re-executed. This process will be repeated until the test results meet the requirements of the test case.

AT&T will document all test results in the Test Results Report described in Attachment D. The Test Results Report will be provided to the Government. At that time, AT&T will ask the Government for acknowledgement of successful completion of OSS Verification Testing.

ATTACHMENT A:

REQUIREMENTS

A. VERIFICATION TESTING OF CONTRACTOR'S OPERATIONAL SUPPORT SYSTEMS

The contractor shall conduct verification testing of its OSS in accordance with its approved OSS Verification Test Plan. The contractor shall complete verification testing within 60 calendar days after GSA approves its OSS Verification Test Plan or within 60 calendar days after the Notice to Proceed, whichever is later. The contractor shall neither issue a Service Order Confirmation (SOC) nor proceed with Networx orders until it successfully completes OSS verification testing. If the Government requests, the contractor shall perform the tests and meet the acceptance criteria in Table E.3-1 each time a new service is offered or the contractor modifies the OSS. The contractor shall record and retain test results for each test performed for a minimum of two years.

The test cases that the contractor shall execute acceptably include those listed in **Table A-1**. The contractor shall demonstrate acceptable performance using one of the following electronic media: Internet secure access, electronic mail, or electronic file transfer. GSA reserves the right to observe all or any part of the OSS verification testing. The contractor shall perform OSS verification testing in accordance with the approved OSS Verification Test Plan at a mutually agreeable time and place and shall provide the test results in accordance with Section C.3.9, Operational Support Systems. The contractor shall rerun verification tests in whole or in part, as required by GSA, to verify that its OSS meets the requirements of this section.

TEST PARA #	TEST CASE #	RFP SECTION #	TEST DESCRIPTION	ACCEPTANCE CRITERIA	SECTION REQUIREMENT ADDRESSED
	1	C.2 C.3.5 J.12.1	Accept an order for each of the services specified in Section C.2, Technical Requirements, that the contractor is contracted to provide	Demonstrate that an authorized Government user can place an order using Internet secure access, electronic mail, or electronic file transfer	OSS Verification Test Plan. Test Case 1 Section 3.1

TEST PARA #	TEST CASE #	RFP SECTION #	TEST DESCRIPTION	ACCEPTANCE CRITERIA	SECTION REQUIREMENT ADDRESSED
				and the order populates the fields in the contractor's ordering system in a way that meets the requirements of J.12.1, Ordering Data Elements	
	2	C.3.5.1.2.2 J.12.2.1 J.12.2.5	Generate required acknowledgements for each order entered in Test Case #1	Using Internet secure access, electronic mail, or electronic file transfer, the contractor demonstrates that its ordering system can provide Order Receipt Acknowledgements and Service Order Completion Notices.	OSS Verification Test Plan. Test Case 2 Section 3.2
	3	C.3.5.1.2.2	Accept a bulk order for each type of order entered in Test Case #1	Using Internet secure access, electronic mail, or electronic file transfer, the contractor demonstrates that its ordering system can accept an order for multiple instances of the same service (bulk order) under a single Agency Service Request Number and provide a single instance of each of the following: Order Receipt Acknowledgement, Service Order Confirmation, Firm Order Commitment Notice, and SOCN and service order number in accordance with Section C.3.5.1.2.2, Agency Places Order And Contractor Provides Agency With Acknowledgement	OSS Verification Test Plan. Test Case 3 Section 3.3
	4	C.3.8.2.2 C.3.8.2.3 C.3.8.2.4	Demonstrate that the system that manages the inventory of Networx services delivered by the contractor produces output that is consistent with the orders that were entered	The contractor demonstrates that its service inventory management system contains a database that maintains a complete and accurate inventory of Networx service orders that were established in Test Cases #1 and #3. The contractor demonstrates that authorized Government users can access this database using secure	OSS Verification Test Plan. Test Case 4 Section 3.4

TEST PARA #	TEST CASE #	RFP SECTION #	TEST DESCRIPTION	ACCEPTANCE CRITERIA	SECTION REQUIREMENT ADDRESSED
				Web queries in accordance with Section C.3.8.2.4, Contractor Makes Networx Inventory Data Available to Government	
	5	C.3.6.1.2.2 C.3.6.1.2.3 C.3.6.1.2.4 C.3.6.1.3.2.2 J.12.4 J.12.4.1 J.12.4.2	Demonstrate that the billing system produces an Invoice File and a Detail Billing File that correspond to Test Case #1 and Test Case #3 and generates invoices that are accurate	The contractor demonstrates that the output of its billing system is consistent with the orders entered into its ordering system in Test Cases #1 and #3, that the billing data elements meet the requirements of Attachments J.12.4, Billing Invoice and Detail, J.12.4.1, Invoice File, and J.12.4.2, Detail Billing File, and that the charges are accurate and assigned in a manner that is consistent with the Agency Hierarchy Code	OSS Verification Test Plan. Test Case 5 Section 3.5
	6	C.3.9.2.1	Demonstrate that the OSS meets Networx security requirements	The contractor demonstrates that its OSS identifies and authenticates each user and that each user can only access information that they are authorized to access	OSS Verification Test Plan. Test Case 6 Section 3.6

Table A-1*: OSS Verification Test Cases.*

ATTACHMENT B:

ORDER ATTRIBUTES

B. TEST PROCEDURE AND ORDER ATTRIBUTES

Each test procedure will include a location to record the following information:

Test case numbers, service ordered, test date(s), test manager, and responsible tester.

Each test procedure is composed of a test step number, input required, output expected, output received. The test step number is a sequential number and is initially incremented by 10 to enable easy entry of additional steps. The input column provides sufficient information to enable the tester to perform the required step without reference to additional materials. Each ordering data element will be identified as a discrete input step. The expected output column provides sufficient information to enable the tester to verify successful completion of the required activity without reference to additional materials. The tester places a check mark in the column when the actual outcome mirrors the expected. The actual outcome column contains values when the actual results deviate from the expected results. **Table B-1** demonstrates the Test Procedure Template. For each service ordered, a distinct test procedure template will be prepared.

TEST CASE	SERVICE ORDERED	TEST DATE(S)	TEST MANAGER	RESPONSIBLE TESTER
1	Telecom Voice	mm/dd/yyyy mm/dd/yyyy	Test Manager Name	Tester's Name
Step Number	***Input Data***		***Expected Output/Outcome***	***Actual Output/Outcome***
00010				
00020				
00030				

Table B-1: Test Procedure Template.

[EM] – Service is mandatory for the Enterprise Services contract.
[EN] – Service is not mandatory for the Enterprise Services contract.

Table B-2: Key to Superscripts.

1 Scope of Services

1.1 Communications Transport Services (CTS)

1.1.1 (Circuit Switched) Voice EN

TEST CASE	SERVICE ORDERED	TEST DATE(S)	TEST MANAGER	RESPONSIBLE TESTER
1	Circuit Switched Voice	mm/dd/yyyy mm/dd/yyyy	Test Manager Name	Tester's Name
Step Number	***Input Data***		***Expected Output/Outcome***	***Actual Output/Outcome***
00010				
00020				
00030				

Table B-3: A test procedure template will be developed for each of the following services ordered.

1.1.2 Circuit Switched Data EN

1.1.3 Toll-Free Service EN

1.1.4 Combined EN

1.1.5 Private Line Service EN

1.1.6 Frame Relay Service EN

1.1.7 Asynchronous Transfer Mode EN

1.1.8 Ethernet EN

1.2 IP-Based Services (IPS)

1.2.1 Premises-Based IP VPN EN

1.2.2 Network-Based IP VPN EM

1.2.3 Voice over IP transport EM

1.2.4 Content Delivery Network EN

1.2.5 Converged IP EN

1.2.6 IP Telephony EN

1.2.7 Internet Protocol (Service) EM

1.2.8 Layer 2 VPN EN

1.3 Optical Based Services (OBS)

1.3.1 Synchronous Optical Network EN

1.3.2 Optical Wavelength EN

1.3.3 Dark Fiber EN

1.4 Special Services (SPS)

1.4.1 Land Mobile Radio EN

1.5 Wireless Services (WLS)

1.5.1 Cellular/PCS EN

1.5.2 Multimode Wireless LAN EN

1.6 Management and Application Services (MAS)

1.6.1 Video Teleconferencing EN

1.6.2 Managed Network EM

1.6.3 Audio Conferencing EN

1.6.4 Teleworking EN

1.6.5 Call Center/Customer Contact Center EN

1.6.6 Web Conferencing EN

1.6.7 Dedicated Hosting EN

1.6.8 Collocated Hosting EN

1.6.9 Storage Service EN

1.6.9.1 Customer Specific Design and Engineering EM

1.6.9.2 Unified Messaging EN

1.6.9.3 Collaboration Support EN

1.8 Security Services (RTS)

1.8.1 Managed Firewall EM

1.8.2 Intrusion Detection and Prevention EM

1.8.3 Managed E-Authentication EN

1.8.4 Vulnerability Scanning EN

1.8.5 Anti-Virus Management EM

1.8.6 Incident Response EN

1.8.7 Secure Managed Email EN

1.8.8 Managed Tiered Security EM

ATTACHMENT C:

OSS VERIFICATION TEST AGENDA (SAMPLE)

For the Networx OSS Verification Test, AT&T acknowledges that the Government may provide test data and may observe the actual test.

Assumptions:

The following assumptions were used to develop the sample agenda.

- The Government will be on site at AT&T in Oakton, VA to enter orders, review notices, verify inventory and review bills.
- The Government will use the Data Dictionary Sample Data provided by AT&T.
- The Government will provide user registration data to create user IDs for test DARs and will provide or accept AT&T's proposed Account Information to create **Business**Direct profiles prior to the start of the test.
- The Government will have multiple test DARs available during the testing period to allow for concurrent tests (as noted in the sample agenda below).

Test Variables:

The following variables may affect the timeframes and tasks of the OSS Verification Test.

- Number of test DARs provided by the Government.
- Quantity of orders tested for each service – the Government may choose to observe testing on a sample set of services within each Service Type. Regardless, AT&T will provide test results for all services.
- Extent of questions and desire to explore our newly developed AT&T **Business**Direct applications supporting Networx.

AT&T processing parameters:

The following parameters impact the OSS Verification Test timeline.

- AT&T needs 2[redacted] to simulate provisioning and process test notices.
- AT&T needs [redacted] to run the bill pull and process the test invoice.

AGENDA:

OSS Test Preparation

The following steps will be performed prior to the Government coming on site to observe the tests:

Agency Administrator and Designated Agency Representative (DAR) test IDs Set Up	Obtain the following information from the Government: User Name, User Address, User Phone Number, User FAX Number Answer to a security question Type of User – Regular or Administrator Agency Hierarchy Codes Type of Services Authorized to Order
***AT&T establishes test Accounts in* BusinessDirect**	Agency profiles established in AT&T **Business**Direct
Test Agency Administrator and test DAR IDs established	Agency Administrator and DAR receive valid ID and passwords

OSS Verification Test

DAY	OSS VERIFICATION TEST ACTIVITY	LOCATION	GOVERNMENT ON SITE	SUPPORTS TEST CASE
Day 1 - Monday	AM – Business Direct Overview PM – Communications Transport Services (CTS) Order Entry and Order Receipt Acknowledgement (ORA) Review	Large Conference Room	✓	1, 2 and 6
Day 2 - Tuesday	Concurrent Order Entry Sessions IP-Based Services (IPS) Optical Based Services (OBS) Special Services (SPS) Wireless Services (WLS)	 Conference Room A Conference Room B Conference Room C Conference Room D	✓	1 and 6
Day 3 - Wednesday	AM - Concurrent Order Entry Sessions Management and Applications Services (MAS) Security Services (RTS) PM – Order Receipt Acknowledgement (ORA) review for all orders	 Conference Room A Conference Room B Large Conference Room	✓	1, 2 and 6
Day 4 – Thursday	Bulk Order Processing	Multiple Conference Rooms	✓	3 and 6
Day 5 – Friday	AT&T Processing Day			
Day 6 -- Monday	AT&T Processing Day			
Day 7 – Tuesday	AM – View and Analyze Inventory and Notices Overview PM – Review Service Order Confirmation Notices (SOCs), Firm Order Commitment Notices (FOCNs), Service Order Completion Notices (SOCNs) for CTS orders	Large Conference Room Large Conference Room	✓	2, 4 and 6
Day 8 -- Wednesday	Concurrent Inventory and Notice Review Sessions IPS OBS SPS WLS	 Conference Room A Conference Room B Conference Room C Conference Room D	✓	2, 4 and 6
Day 9 – Thursday	AM - Concurrent Inventory and Notice Review Sessions MAS RTS PM – Bulk Ordering Inventory and Review Sessions	 Conference Room A Conference Room B Large Conference Room	✓	2,3,4 and 6

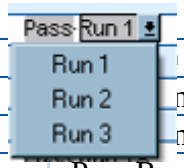
DAY	OSS VERIFICATION TEST ACTIVITY	LOCATION	GOVERNMENT ON SITE	SUPPORTS TEST CASE
Day 10 – Friday	AT&T Processing Day			
Day 11 – Monday	AT&T Processing Day			
Day 12 – Tuesday	AM – View and Analyze Government Bills Overview PM – Review bills for all services	Large Conference Room Large Conference Room	✓	5 and 6
Day 13 - Wednesday	Summarize Security findings (Test Case 6) Overview of Dispute Resolution Tool Review of OSS Verification Test Cases Open Q & A on *View and Analyze Inventory and Notices* Test Wrap Up	Large Conference Room	✓	1- 6

ATTACHMENT D:

OSS VERIFICATION TEST RESULTS REPORT

OSS Verification Test Results

	NETWORX SERVICE	TEST CASE 1	TEST CASE 2	TEST CASE 3	TEST CASE 4	TEST CASE 5	TEST CASE 6
Communications Transport Services(CTS)							
1	(Circuit Switched) Voice	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
2	Circuit Switched Data	Pass Run 1	Fail Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
3	Toll-Free Service	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
4	Combined	Pass Run 1	Fail Run 1	Fail Run 1	Pass Run 1	Pass Run 1	Pass Run 1
5	Private Line Service	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
6	Frame Relay Service	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
7	Asynchronous Transfer Mode	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
8	Ethernet	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
IP-Based Services(IPS)							
9	Premises-Based IP VPN	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
10	Network-Based IP VPN	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
11	Voice over IP Transport	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
12	Content Delivery Network	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Fail Run 1	Pass Run 1
13	Converged IP	Fail Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
14	IP Telephony	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
15	Internet Protocol (Service)	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
16	Layer 2 VPN	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
Optical Based Services (OBS)							
17	Synchronous Optical Network	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Fail Run 1	Pass Run 1



	NETWORX SERVICE	TEST CASE 1	TEST CASE 2	TEST CASE 3	TEST CASE 4	TEST CASE 5	TEST CASE 6
	(SONET)						
18	Optical Wavelength	Pass Run 1	Pass Run 1	Pass Run 1	Fail Run 1	Pass Run 1	Pass Run 1
19	Dark Fiber	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
Special Services (SPS)							
20	Land Mobile Radio	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
Wireless Services (WLS)							
21	Cellular/PCS						
22	Multimode Wireless LAN						
Management and Application Services (MAS)							
23	Video Teleconferencing	Pass Run 1	Pass Run 1	Fail Run 1	Pass Run 1	Pass Run 1	Pass Run 1
24	Managed Network	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
25	Audio Conferencing	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Fail Run 1
26	Teleworking	Pass Run 1	Fail Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
27	Call Center/ Customer Contact Center	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
28	Web Conferencing	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
29	Dedicated Hosting	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
30	Collocated Hosting	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
31	Storage Services	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
32	Customer Specific Design and Engineering	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1

	NETWORX SERVICE	TEST CASE 1	TEST CASE 2	TEST CASE 3	TEST CASE 4	TEST CASE 5	TEST CASE 6
33	Unified Messaging	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
34	Collaboration Support	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
Security Services (RTS)							
35	Managed Firewall	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
36	Intrusion Detection & Prevention	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
37	Managed E-Authentication	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
38	Vulnerability Scanning	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
39	Anti-Virus Management	Pass Run 1	Pass Run 1	Fail Run 1	Pass Run 1	Pass Run 1	Pass Run 1
40	Incident Response	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
41	Secure Managed Email	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1
42	Managed Tiered Security	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1	Pass Run 1

Table D-1: OSS Verification Test Results.

ATTACHMENT E:

OSS VERIFICATION TEST SCHEDULE

TASKS	DURATION
Approval of OSS Verification Test or Notice to Proceed, whichever is later	start date
Test Preparation Phase	
Develop Test case 1-6	**10 days**
Review/Analyze input data	2 days
Define expected results	5 days
Define ordering data elements for each service	3 days
Complete Test case 1 -6	**3 days**
Test Case Peer Review	**3 days**
Notify internal test team	5 days prior
Distribute review materials	3 days prior
Perform test team peer review	3 days
Incorporate Peer Review comments	**5 days**
Test Case 1- 6 Formal Review	**3 days**
Schedule stakeholder review	5 days prior
Distribute review materials	3 days prior
Perform formal review	3 days
Incorporate review comments	**4 days**
Complete Test case 1- 6	**4 days**
Test Execution Phase	
Execute Group 1 – Group 7 Orders	
Execute Group 1- Group 7 orders	
Record actual results	
Analyze actual vs. expected results	
Evaluate discrepancies	
Document/log discrepancy (if applicable)	
Prepare test results report	
Distribute test results report	
Go/NoGo Group 1 – Group 7 Orders	
Record Security Results (Pass/Fail)	
Execute Group 1 – Group 7 Order Receipt Acknowledgements (ORAs)	
Execute Order Receipt Acknowledgements (ORAs) for Group 1 – Group 7 orders	
Capture actual results	
Analyze actual vs. expected results	
Evaluate discrepancies	
Document/log discrepancy (if applicable)	
Prepare test results report	
Distribute test results report	
Go/NoGo Group 1 – Group 7 Order Receipt Acknowledgements (ORAs)	
Record Security Results (Pass/Fail)	
Execute Group 1 – Group 7 Service Order Confirmations (SOCs)	

TASKS	DURATION
Execute Service Order Confirmation (SOCs) for Group 1 – Group 7 orders	
Record actual results	
Analyze actual vs. expected results	
Evaluate discrepancies	
Document/log discrepancy (if applicable)	
Prepare test results report	
Distribute test results report	
Go/NoGo Group 1 – Group 7 Service Order Confirmations (SOCs)	
Record Security Results (Pass/Fail)	
Execute Group 1 – Group 7 Firm Order Commitment Notices (FOCNs)	
Execute Group 1 – Group 7 Firm Order Commitment Notices (FOCNs)	
Record actual results	
Analyze actual vs. expected results	
Evaluate discrepancies	
Document/log discrepancy (if applicable)	
Prepare test results report	
Distribute test results report	
Go/NoGo Group 1 – Group 7 Firm Order Commitment Notices (FOCNs)	
Record Security Results (Pass/Fail)	
Execute Group 1 – Group 7 Service Order Completion Notices (SOCNs)	
Execute Group 1 – Group 7 Service Order Completion Notices (SOCNs)	
Record actual results	
Analyze actual vs. expected results	
Evaluate discrepancies	
Document/log discrepancy (if applicable)	
Prepare test results report	
Distribute test results report	
Go/NoGo Group 1 – Group 7 Service Order Completion Notices (SOCNs)	
Record Security Results (Pass/Fail)	
Execute Group 1 – Group 7 Inventory Verification	
Execute Group 1 – Group 7 Inventory Verification	
Record actual results	
Analyze actual vs. expected results	
Evaluate discrepancies	
Document/log discrepancy (if applicable)	
Prepare test results report	
Distribute test results report	

TASKS	DURATION
Go/NoGo Group 1 – Group 7 Inventory Verification	
Record Security Results (Pass/Fail)	
Execute Group 1 – Group 7 Billing Verification	
Execute Group 1 – Group 7 Billing Verification	
Record actual results	
Analyze actual vs. expected results	
Evaluate discrepancies	
Document/log discrepancy (if applicable)	
Prepare test results report	
Distribute test results report	
Go/NoGo Group 1 – Group 7 Billing Verification	
Record Security Results Pass/Fail	
Install to Production	

Note 1: *This is a sample test schedule to demonstrate the activities and milestones to be planned. Actual test schedule dates will be applied and revisions to the schedule will occur, if needed, when the OSS Verification Test Plan is approved.*

Note 2: *The execution of some test cases will occur concurrently where applicable.*

Table E-1: OSS Verification Test Schedule.