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4 BSS Verification Test Plan [L.30.2.3; E.2.1]

4.1 Scope: Inspection and Acceptance [E.2.1.1]

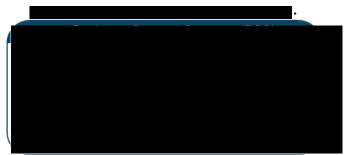
4.1.1 FUNCTIONAL AND SECURITY REQUIREMENTS [L.30.2.3-1; E.2.1.1(1)]

Verizon has designed an approach to testing its Business Support System (BSS) for the General Services Administration's (GSA) Enterprise Infrastructure Solutions (EIS) contract to verify that Verizon's BSS meets all functional, regression, load, and security requirements.

This draft BSS Verification Test Plan provides a high-level approach for addressing the scope of Inspection and Acceptance requirements, and it includes brief descriptions of test scenarios. A final version of the plan, with additional details, will be provided 30 days after Notice to Proceed (NTP) as required in RFP Section F. The BSS Verification Test Plan will be developed in conjunction with the BSS Development and Implementation plan to properly maintain Verizon's System Development Life Cycle (SDLC) process.

| To confirm that test scenarios outlined in RFP Section E.2.1.2.2 are met, Verizon has assembled a team focused primarily on BSS Verification testing. This team has a solid understanding of the contract and security requirements, Verizon systems, GSA systems, and has years of professional experience working on Quality Assurance (QA) initiatives. |
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| 4.1.1.1 |
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| Verizon BSS Security Model & Compliance Requirements. Verizon is committed to |
| providing the highest level of support in the delivery of BSS SSP, as well as providing |
| standards-based support to GSA security and Assessment and Authorization (A&A) |
| activities. |
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Verizon is leveraging its commercial systems to support the EIS Program. These are world class systems that are supported by Verizon information technology (IT) and support its key business and operations functions as identified in RFP Section G.5.4, and include customer management, financial management, order management, inventory management, service management and program management.



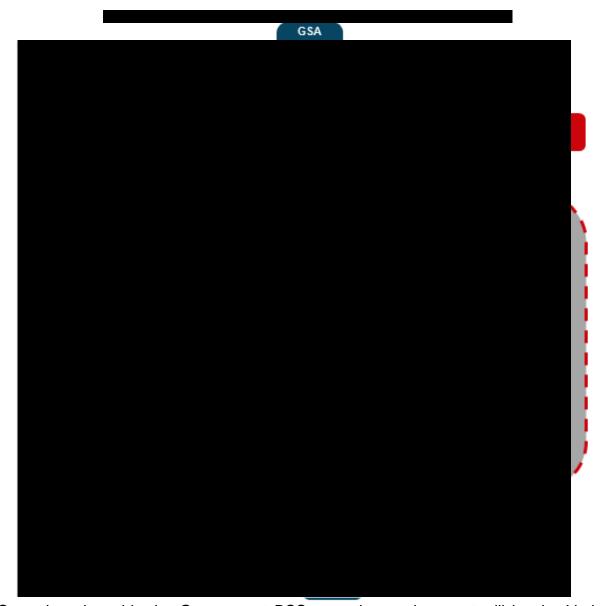
Verizon will meet the NIST Risk Management Framework (RMF) and the applicable associated FISMA requirements in the BSS FISMA subset. Verizon is defining this subset to be the BSS systems that implement and aggregate the Section J data sets.

Verizon will implement and support FISMA policies within the BSS security boundary. Verizon will comply with applicable NIST guidelines, and will develop the BSS System Security Plan (SSP) to be written in accordance with NIST Special Publication (SP) 800-18, Rev 1. The BSS SSP will meet security requirements as defined in RFP Section G.5.6.4 at a Moderate impact level. Outside of the FISMA boundary, Verizon will support the BSS systems using its internal security policies and GSAM compliance.

Verizon has also developed an RMF for both its EIS Systems and the BSS FISMA boundary. These plans identify how Verizon has a top-to-bottom risk approach to security that is supported by management and constantly updated and improved (please refer to Proposal Section 8 BSS Risk Management Framework for details.).

sections in the RFP, including Section G.5.6.1. Verizon defines the BSS FISMA

boundary to be the implementation and the aggregation of the RFP Section J data sets.



Operating alongside the Government BSS operating environment will be the Verizon BSS operating environment where a subset of Verizon's backend Support System is customized to support the EIS BSS subsystem. The Verizon BSS operating environment consists of a collection of applicable backend subsystems that process and enable the EIS services offered in this proposal. A list of the functions performed by these subsystems includes (but is not limited to): notifications, order management, dispute management, service level agreement (SLA) management, billing management, service management, trouble ticket management, and account management. From a security perspective, the Verizon BSS operating environment is governed by Verizon-

specific security policies, instructions, guidelines, and best practices such as CPI/CPS 810 and CPI/CPS 306. This additional security layer further augments the Government BSS operating environment and provides additional protection to enhance the BSS security posture. **Figure 4.1.1.2-1** above illustrates Verizon's BSS architecture and FISMA security boundary.

4.1.2 Management and Operations [L.30.2.3-2; E.2.1.1-Bullet 2]

Verizon's BSS testing will be performed for management and operation functions supporting the Ordering, Billing, Inventory Management, Disputes, SLA Management and Trouble Ticketing processes that are described in RFP Sections G.3 – G.8, E.2.1.1, and J.2. The BSS testing will be performed for all management and operation functions supporting Ordering, Billing, Inventory Management, Disputes, SLA Management and Trouble Ticketing processes described in RFP Sections G and J.2.

4.1.3 BSS SECURITY REQUIREMENTS [L.30.2.3-3; E.2.1.1 BULLET 3; G.5.6]

Functional Compliance. The BSS verification test planning will be based on the functional requirements outlined in RFP Section G.5.6 BSS Security Requirements. The BSS security testing per Proposal Section 5.6 and A&A is applicable for the Government operating environment FISMA boundary only.

Evaluation Based on Completeness, and A&A. Verizon understands that acceptance of the security requirements will be based on evaluation for completeness for the ATO certification. The following documentation will form the basis of the BSS security testing and evaluation effort, and the A&A process, as well as the test scenario for BSS SEC-TS-01:

- 1. The BSS SSP will cover all the controls across the 18 control families mandated per FIPS 200, using specific controls identified in NIST SP 800-53 Rev 4.
- Boundary Scope Document (BSD) will be provided to determine the actual security
 assessment boundary per NIST SP 800-37. The set of information resources
 allocated to the BSS information system make up the boundary of the Verizon
 BSS.
- 3. Interconnection Agreements define the interfaces and interconnections to system(s) outside the defined boundary per NIST SP 800-47.

- 4. GSA Control Tailoring Worksheet documents Verizon-implemented settings per GSA IT Security Procedural Guide 06-30 and NIST SP 800-53 Rev 4.
- 5. The SSP attachment documents rules of behavior, system inventory, contingency planning, contingency test planning, and the privacy impact assessment.

Verizon understands that the BSS must have a new A&A conducted and approved by GSA at least every three (3) years; when there is a significant change that impacts the system's security posture; or, when a system may qualify for ongoing security authorizations that are not time-limited. All NIST SP 800-53 Rev 4 controls will be tested and assessed no less than every three (3) years unless otherwise determined by the GSA Authorizing Official (AO). In addition, Verizon will deliver the results of the annual FISMA assessment conducted per GSA CIO IT Security Procedural Guide 04-26. Verizon also understands that the failure to obtain and maintain a valid A&A will be grounds for termination of the contract.

Standards-Based Risk Management Framework (RMF). Verizon will the guidelines stipulated in the EIS RFP, such as NIST SP 800-37, FIPS 199, and GSA IT Security Procedural Guide 06-30, to perform security testing and validation activities required for the A&A processes. Verizon will provide the deliverables identified in the RFP as part of the initial security A&A package, as well as follow up updates as required. Specifically, Verizon will use the following NIST RMF activities to manage enterprise-level risk in implementing the A&A process:

- RMF Step 1. Categorize Information System (FIPS 199 / SP 800-60 / SP 800-18 Rev 1).
- RMF Step 2. Select Security Controls (FIPS 200 / SP 800-53 R3 / SP 800-18 Rev 1 GSA Control Tailoring Workbook).
- RMF Step 3. Implement Security Controls (GSA & CIS Hardening Guides / SP 800-70 / SP 800-18 R1).
- RMF Step 4. Assess Security Controls (GSA Assessment Test Cases / SP 800-18 Rev 1).
- RMF Step 5. Authorize Information System (NIST SP 800-37 Rev 1).

 RMF Step 6. Monitor Security Controls (SP 800-37 R1 / GSA Assessment Test Cases).

Verizon understands the complexity and dependencies involved in the EIS BSS verification testing process, and will work closely with GSA to plan and manage the entire ATO process.

4.1.3.1 General Security Compliance Requirements [G.5.6.1]

Verizon has developed its solution to meet current standards and versions of applicable standards, directives, statutes, regulations, and other publications as outlined in the EIS RFP. Please refer to Verizon's response to General Security compliance requirements in Proposal Volume 2, Section 1.1.4.6.1 General Security Compliance Requirements.

4.1.3.2 Security Compliance Requirements [G.5.6.2]

Please refer to Verizon's response to security compliance requirements in Proposal Volume 2, Section 1.1.4.6.2 Security Compliance Requirements.

4.1.3.3 Security Assessment and Authorization [G.5.6.3]

Please refer to Verizon's response to security compliance requirements in Proposal Volume 2, Section 1.1.4.6.3 Security Assessment and Authorization.

4.1.3.3.1 System Security Plan [G.5.6.4]

Verizon understands that a System Security Plan (SSP) is a requirement of Office of Management and Budget (OMB) Circular A-130, the purpose of which is to provide guidance for security protection measures of the information systems used to support the EIS services with FISMA requirements. The SSP describes the controls (in place or planned) for meeting FISMA requirements, and also describes responsibilities and expected behavior of individuals who access the system.

Specifically, the Verizon SSP will provide a thorough description of the security management, organization, resources, strategies, practices, policies, processes, procedures, tools, systems, and reports that Verizon will use to protect the EIS infrastructure and its service components. It provides the framework to implement the steps and activities required to meet Government security requirements and needs to confirm and maintain the confidentiality, integrity, and availability of EIS services,

information, and operational support systems; and to prevent security exposure of EIS services. Verizon will provide the system security deliverables as outlined in RFP Sections C.1.8.7.5 and Section F Deliverables to an agency COR/ISSO/ISSM initially, quarterly, and annually or when significant changes occur to the system specifically identified under the TO.

Verizon will verify that the System Owner, responsible for the security plan, has a comprehensive, detailed plan for implementing security and monitoring its effectiveness. Security plans will reflect input from various individuals with responsibilities concerning the system, including functional "end users," Information Owners, the System Administrator, and the System Security Manager.

Verizon understands that its personnel will require access to Government information and/or access to Government IT systems operated on behalf of the Government. Verizon personnel with access to the Verizon EIS IT system, which is within the security A&A scope, will have successfully completed a background investigation in accordance with Homeland Security Presidential Directive-12 (HSPD-12), OMB guidance M-05-24 and M-11-11, and as specified in agency-identified security directives and procedural guides for background investigations to provide services under this contract.

Please also refer to Proposal Volume 2, Section 1.1.4.6.4 BSS System Security Plan (BSS SSP).

4.1.3.3.2 Additional Security Requirements [G.5.6.6]

Please refer to Verizon's response to additional security requirements in Proposal Volume 2, Section 1.1.4.6.6 Additional Security Requirements.

4.1.3.3.3 Personnel Security Suitability [G.5.6.6.1]

Please refer to Verizon's response to personnel security suitability requirements in Proposal Volume 2, Section 1.1.4.6.6.1 Personnel Security Suitability.

4.1.3.3.4 Personnel Background Investigation Requirements [G.5.6.6.2]

Verizon has reviewed and understands requirements outlined in RFP Section G.5.6.6.2, and acknowledges that the government will be responsible for the cost of background investigations, as outlined in RFP Section G.5.6.6.2.

4.1.4 BSS TEST CASES [L.30.2.3, NO. 4; E.2.1.3]

Verizon's testing will include the BSS test cases defined in RFP Section E.2.1.3.

Verizon is committed to providing industry leading testing of its systems and services to provide customer satisfaction. For EIS, this will entail testing scenarios that are outlined in RFP Sections E.2.1.2 and E.2.1.3. All scenarios will be accounted for and deliverables will be documented and delivered in a timeframe that is mutually agreed upon by both parties. Having conducted OSS Testing and having completed a vast array of projects with multiple agencies throughout the life of the Networx contract, Verizon understands and has experience with the level of detail that needs to be included in a BSS coverage plan. Verizon will verify that the scope includes differing functionality, order types, data, user authentication, and deliverables. Verizon will perform each scenario as many times as necessary to meet the needs of GSA.

To confirm that all test scenarios outlined in RFP Sections E.2.1.2 and E.2.1.3 are met, Verizon has assembled a team of individuals who will be solely focused on BSS Verification testing. The team will also consist of a QA lead, experienced QA analysts, and will be backed by Verizon's leading IT organization as well as internal SMEs in various functional groups. Prior to the start of BSS Verification Testing, Verizon will submit a Test Plan which outlines every scenario to be executed as part of the effort. In certain instances, different data sets (i.e., different order types, users, services, service features, etc.) will be required to verify proper coverage. In other instances, a single test case may be sufficient. The number of test cases per scenario will be mutually agreed upon by both parties prior to the start of BSS Testing after the data sets have been received. Verizon intends to run each test case as many times as necessary to achieve a passing result.

4.1.4.1 BSS for Management and Operational Functions [E.2.1.1 Bullet 3]

Verizon will comply with RFP Section G.5.6 BSS Security requirements, which will be incorporated into the BSS test plan. Due to space constraints, we have provided our response in Proposal Volume 2, Section 1.1.4.6.6 Additional Security Requirements.

4.1.4.2 Test Cases Defined in Section E.2.1.3 [E.2.1.1 Bullet 4]

Verizon will comply with RFP Section E.2.1.3 requirements, which will be incorporated into the BSS test plan. Due to space constraints, we have provided our response in Proposal Volume 2, Section 4.2.2 Test Scenarios.

4.1.4.3 Use Cases for Quality, Utility and Customer Access Features [E.2.1.1 Bullet 5] Verizon's BSS testing will include use cases for quality, utility, and customer access features.

4.1.4.4 Government to Observe All or Part of Verification Testing [E.2.1.1 Bullet 6]

Verizon will allow government representative(s) to observe all or any part of the verification testing.

4.1.4.4.1 New Service Tests: Sections G and J.2

As an industry leader with vast experience providing services to Government customers, Verizon is accustomed to performing tests that measure continued compliance when new products are introduced on contracts or new functionality is developed within the OSS. Specifically, Verizon has worked with the government for the past eight (8) years on new Networx projects and will draw on those experiences to verify that necessary criteria are adequately tested.

Verizon will verify that any new testing that needs to be accommodated during or after BSS Verification Testing is executed by a team of highly qualified QA analysts, led by an experienced manager, and backed by Verizon's IT organization as well as internal SMEs.

If a new service is introduced on EIS or new functionality is developed that impacts the current BSS, Verizon will do a full assessment to determine which (if any) existing test cases should be used for verification, which (if any) existing test cases should be modified, and which (if any) new test cases should be created. Verizon will execute an appropriate combination of these test cases until all components pass and, upon completion, will provide GSA with a BSS Verification Test Results report within seven (7) days.

4.1.4.5 Verification Testing at Acceptable Date (E.2.1.1 Bullet 7)

Verizon will perform BSS verification testing according to the accepted BSS Test Plan at a mutually acceptable date with the government.

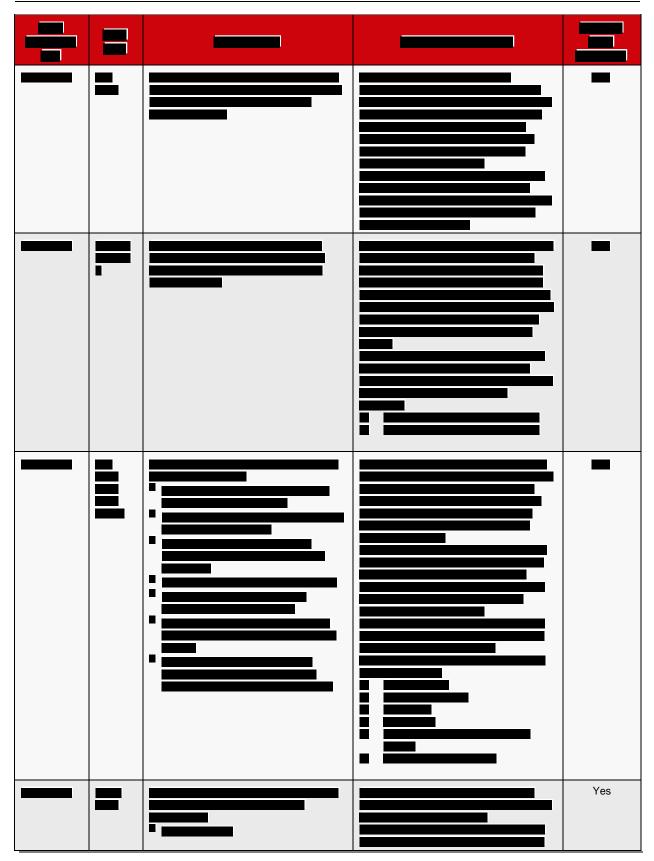
| 4.2 BSS Test Scenarios [E.2.1.2] |
|---|
| 4.2.1 Testing Prerequisites [E.2.1.2.1] |
| Internal Unit Testing. |
| |
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| • |
| Final BSS Test Plan to be Verified and Accepted by GSA. Prior to the start of BSS |
| Verification Testing, Verizon shall submit a Test Plan that outlines every scenario to be |
| executed as part of the effort. |
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| BSS Security and Functional Testing. Verizon will support BSS security and |
| |
| functional testing as defined in RFP Sections G.5.6 BSS Security Requirements and |
| G.2.3 BSS Final Contract Acceptance. |
| 4.2.2 Test Scenarios [E.2.1.2.2] |

Section E. BSS TS-01-01 through BSS TS-01-04 will be performed using the

of the data sets and prior to the start of BSS Verification Testing.

Verizon will perform all test scenarios below in accordance with the acceptance criteria outlined by GSA. Test Case details will be documented and communicated after receipt

methodologies as outlined in the contract (XML over secure web services and PSV over SFTP).



22 February 2016



4.2.3 BSS Test Cases [E.2.1.3]

Verizon will accept, incorporate into the BSS Test Plan, and successfully execute test cases provided for each of the test scenarios above.

4.2.3.1 Test Conditions [E.2.1.3 Bullet 1]

Verizon will accept the following test conditions:

 No testing between the contractor and GSA will occur until both the contractor's BSS and the GSA Conexus have passed unit testing;

- All testing to be performed on the actual system to be used in delivering service (i.e., special purpose "test systems" will not be used);
- Unless otherwise specified, all data transfers are to use the mechanism specified in RFP Section J.2 for that data set.

4.2.3.2 GSA Provided Test Data [E.2.1.3 Bullet 2]

Verizon will use GSA provided test data for all BSS verification testing unless specified otherwise:

- This data will be used for testing purposes only;
- No customer "live" data will be used for testing;
- This data will be a realistic simulation of actual customer data;
- The test data will include, in some tests, intentional errors intended to test the contractor's BSS error handling.

4.2.3.3 Tiered Approach [E.2.1.3 Bullet 3]

BSS testing will follow a tiered approach, as follows:

- Verizon will accept multiple test cases for the test scenarios defined in RFP Section
 E.2.1.2;
- Verizon will accept, incorporate into the BSS Test Plan, and successfully execute each test case with one or more test data sets.
- In providing test data sets, GSA will group them into Test Subcases.

4.2.3.4 BSS Functional Testing Acceptance [E.2.1.3 Bullet 4]

BSS functional testing acceptance will include the following:

- Verizon's BSS will not have completed functional testing until all BSS Test Scenarios (RFP Section E.2.1.2) are passed;
- A test scenario will not be considered passed until Verizon's BSS properly handles each associated test case:
- A test case will not be considered passed until Verizon's BSS properly handles each associated subcase twice in succession using different data sets;
- A subcase will not be considered passed until Verizon's BSS properly handles the data sets following the prescribed actions with no errors or warnings.

Verizon will provide a BSS Scope document prior to the start of BSS Testing that outlines all of the details associated with the following test cases.

4.2.3.4.1 BSS-TS01: Direct Data Exchange [E.2.1.3.1]

Verizon will test the following test cases under this test scenario.

Table 4.2.3.4.1-1. BSS-TS01-01: XML over Secure Web Services [E.2.1.3.1.1].

| Table 4.2.0.4.1 1: Boo Tool of: AimE over occure veb octvices [E.E. 1.0.1.1]. | | |
|---|--|--|
| Test Scenario | BSS-TS01: Direct Data Exchange | |
| Test Case ID | BSS-TS01-01 | |
| Test Case Description | XML over Secure Web Services | |
| Requirements Reference(s) | • G.5.3.2 | |
| | • J.2.9 | |
| Prerequisites | • N/A | |
| Government Input(s) | Properly formatted Government data set listed as using web services as the transfer mechanism in Section J.2 | |
| Expected Output(s) | Properly formatted contractor data set that meets the following criteria: Listed as using web services as the transfer mechanism in Section J.2 | |
| | Includes data derived from the government input | |
| Acceptance Criteria | Successful data transfer | |
| | Correct technical aspects | |
| Data Set Description | Each Government-provided test data set will include: One Government data set listed as using web services as the transfer mechanism in Section J.2 | |

Table 4.2.3.4.1-2. BSS-TS01-02: PSV over SFTP [E.2.1.3.1.2].

| Table 4.2.3.4.1-2. B00-1001-02. 1 0 0 0 0 1 11 [E.2.1.3.1.2]. | | |
|---|--|--|
| Test Scenario | BSS-TS01: Direct Data Exchange | |
| Test Case ID | BSS-TS01-02 | |
| Test Case Description | PSV over SFTP | |
| Requirements Reference(s) | • G.5.3.2 | |
| | • J.2.9 | |
| Prerequisites | • N/A | |
| Government Input(s) | Properly formatted government data set listed as using SFTP as the transfer mechanism in Section J.2 | |
| Expected Output(s) | Properly formatted contractor data set that meets the following criteria: Listed as using SFTP as the transfer mechanism in Section J.2 | |
| | Includes data derived from the Government input | |
| Acceptance Criteria | Successful transfer of PSV data | |
| | Correct technical aspects | |
| Data Set Description | Each Government-provided test data set will include: One Government data set listed as using SFTP as the transfer mechanism in Section J.2 | |

4.2.3.4.2 BSS-TS02: Task Order and Data Management Setup [E.2.1.3.2]

Verizon will test the following test cases under this test scenario.

Table 4.2.3.4.2-1. BSS-TS02-01: Direct Billing Account Setup [E.2.1.3.2.1].

| Test Scenario | BSS-TS02: Task Order and Account Management Setup |
|-----------------------|--|
| | |
| Test Case ID | BSS-TS02-01 |
| Test Case Description | Direct Billing Account Setup |
| Requirements | • G.3 |
| Reference(s) | • J.2.2 |
| | • J.2.3 |
| Prerequisites | • N/A |
| Government Input(s) | Task order controlled data as defined in Section J.2.3 |
| | Task order associated data as defined in Section J.2.3 |
| | System Reference data as defined in Section J.2.3 |
| Expected Output(s) | Direct Billed Agency Setup (DBAS) CDRL |
| Acceptance Criteria | All required CDRLs as defined in Section J.2.3 |
| | Accurate data based on inputs |
| | Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: Sample TO controlled data transferred in the form of a sample TO |
| | Sample TO associated data transferred in free format (not previously defined) unless the contractor specifies in their proposal that customer registration is to be submitted via their web interface and that interface collects all of the required data |
| | Sample System Reference data transferred using the mechanism specified in Section J.2 |

4.2.3.4.3 BSS-TS03: Role Based Access Control [E.2.1.3.3]

Verizon will test the following test cases under this test scenario.

Table 4.2.3.4.3-1. BSS-TS03-01: Authorized User Access Verification [E.2.1.3.2.1].

| Test Scenario | BSS-TS03: Role Based Access Control |
|---------------------------|---|
| Test Case ID | BSS-TS03-01 |
| Test Case Description | Authorized User Access Verification |
| Requirements Reference(s) | • G.5 • J.2.3 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS |
| Government Input(s) | User attempts to: Sign into BSS Access BSS areas to which they are an authorized user Exercise the full range of functionality (read/write) permitted for their role |
| User is permitted to: | |
| Acceptance Criteria | Access is granted No security errors displayed |

| Test Scenario | BSS-TS03: Role Based Access Control |
|------------------------------|--|
| Test Case ID | BSS-TS03-01 |
| Test Case Description | Authorized User Access Verification |
| Data Set Description | Each Government-provided test data set will include: |
| | Role to be tested |
| | Functionality to be tested |

Table 4.2.3.4.3-2. BSS-TS03-02: Unauthorized User Access Denial Verification [E.2.1.3.2.2].

| Test Scenario | BSS-TS03: Role Based Access Control | |
|------------------------------|--|--|
| Test Case ID | BSS-TS03-02 | |
| Test Case Description | Unauthorized User Access Denial Verification | |
| Requirements Reference(s) | • G.5 | |
| | • J.2.3. | |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS | |
| Government Input(s) | User attempts to: | |
| | o Sign into BSS | |
| | Access BSS areas to which they are not an authorized user | |
| | Exercise functionality (read/write) not permitted for their role | |
| Expected Output(s) | User is only granted access appropriate to the role, area and functionality specified in the test data set: Access to BSS | |
| | Access to specific BSS areas | |
| | Access to specific functionality | |
| | User is shown security error message | |
| Acceptance Criteria | Access is denied | |
| | Appropriate errors are displayed | |
| Data Set Description | Each Government-provided test data set will include: Role to be tested (may be specified as none if the set is intended to show denial of unauthorized users) | |
| | Functionality to be tested | |

4.2.3.4.4 BSS-TS04: Role Based Access Control [E.2.1.3.4]

Verizon will test the following test cases under this test scenario.

Table 4.2.3.4.4-1. BSS-TS04-01: New Order via Web Interface [E.2.1.3.4.1].

| | BOO TOOK OF THE WORLD WAS INCOMED (E.E. HOTH) |
|---------------------------|---|
| Test Scenario | BSS-TS04: Service Ordering |
| Test Case ID | BSS-TS04-01 |
| Test Case Description | New Order via Web Interface |
| Requirements Reference(s) | • G.3 |
| | • G.5.3.1 |
| | • J.2.4 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS |
| Government Input(s) | Service Order (SO) with all required data elements as described in Section J.2.10.2.1.15 |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: Service Order Acknowledgment (SOA) |

| | Service Order Confirmation (SOC) |
|----------------------|--|
| | Firm Order Commitment Notice (FOCN) |
| | Service Order Completion Notification (SOCN) |
| Acceptance Criteria | All required CDRLs as defined in Section J.2.4 |
| | Accurate data based on inputs |
| | Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: |
| | A complete SO for one or more services listed in Section C.2 of the contract |
| | SO to be entered into the contactor's BSS via the contractor's web interface as described in Section G.5.3.1 |

Table 4.2.3.4.4-2. BSS-TS04-02: New Order via Email [E.2.1.3.4.2].

| 1 abie 4.2.3.4 | .4-2. BSS-1504-02: New Order via Email [E.2.1.3.4.2]. |
|---------------------------|---|
| Test Scenario | BSS-TS04: Service Ordering |
| Test Case ID | BSS-TS04-02 |
| Test Case Description | New Order via Email |
| Requirements Reference(s) | • G.3 |
| | • G.5.3.1 |
| | • J.2.4 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into |
| | contractor BSS |
| Government Input(s) | Service Order (SO) with all required data elements as described in |
| | Section J.2.10.2.1.15 |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: |
| | Service Order Acknowledgment (SOA) |
| | Service Order Confirmation (SOC) |
| | Firm Order Commitment Notice (FOCN) |
| | Service Order Completion Notification (SOCN) |
| Acceptance Criteria | All required CDRLs as defined in Section J.2.4 |
| | Accurate data based on inputs |
| | Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: |
| | A complete SO for one or more services listed in Section C.2 of |
| | the contract |
| | SO submitted via a means listed in J.2.4 other than the |
| | contractor's web interface |

Table 4.2.3.4.4-3. BSS-TS04-03: Disconnect Order [E.2.1.3.4.3].

| Table 4.2.3.4.4-3. D33-1304-03. D13connect Order [L.2.1.3.4.3]. | |
|---|--|
| Test Scenario | BSS-TS04: Service Ordering |
| Test Case ID | BSS-TS04-03 |
| Test Case Description | Disconnect Order |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| | • J.2.10.1.1.4.2 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS |
| | Previously provisioned circuit or service element entered into the contractor BSS |

| Test Scenario | BSS-TS04: Service Ordering |
|-----------------------|--|
| Test Case ID | BSS-TS04-03 |
| Test Case Description | Disconnect Order |
| Government Input(s) | Service Order (SO) with all required data elements as described in Section J.2.4 for the disconnect of A circuit or service element (CLIN) A feature of a circuit or service element |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: Service Order Acknowledgment (SOA) Service Order Confirmation (SOC) |
| | Firm Order Commitment Notice (FOCN) if required based on the requirements described in Section J.2.4 Service Order Completion Notification (SOCN) |
| Acceptance Cuitoria | · |
| Acceptance Criteria | All required CDRLs Accurate data based on inputs Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: A complete SO for the disconnect of a circuit or service element or a feature of a circuit or service element as described in Section G.3 and Section J.2.10.1.1.4.2 |

Table 4.2.3.4.4-4. BSS-TS04-04: Feature Addition Order [E.2.1.3.4.4].

| Test Scenario | BSS-TS04: Peature Addition Order [E.Z.1.3.4.4]. |
|---------------------------|---|
| Test Case ID | BSS-TS04-04 |
| Test Case Description | Feature Addition Order |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| | • J.2.10.1.1.4.2 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into |
| | contractor BSS |
| | Previously provisioned circuit or service element entered into the |
| | contractor BSS |
| Government Input(s) | Service Order (SO) with all required data elements as described in |
| | Section J.2.4 for the addition of a feature to a circuit or service |
| 5 | element |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: |
| | Service Order Acknowledgment (SOA) |
| | Service Order Confirmation (SOC) |
| | Firm Order Commitment Notice (FOCN) |
| | Service Order Completion Notification (SOCN) |
| Acceptance Criteria | All required CDRLs |
| | Accurate data based on inputs |
| | Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: |
| | A complete SO for the addition of a feature to a circuit or service |
| | element as described in Section G.3 and Section J.2.10.1.1.4.2 |

Table 4.2.3.4.4-5. BSS-TS04-05: Move Order [E.2.1.3.4.5].

| Table 4.2.3.4.4-5. BSS-TS04-05: Move Order [E.2.1.3.4.5]. | |
|---|--|
| Test Scenario | BSS-TS04: Service Ordering |
| Test Case ID | BSS-TS04-05 |
| Test Case Description | Move Order |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| | • J.2.10.1.1.4.2 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS |
| | Previously provisioned circuit or service element entered into the contractor BSS |
| Government Input(s) | Two Service Orders (SOs) that combine to specify the move of a circuit or service element with all required data elements as described in Section J.2.4 One SO for the disconnect of the circuit or service element at the old location |
| | Second SO for the installation of the identical circuit or service element at the new location |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: Service Order Acknowledgment (SOA) |
| | Service Order Confirmation (SOC) |
| | Firm Order Commitment Notice (FOCN) |
| | Service Order Completion Notification (SOCN) |
| Acceptance Criteria | All required CDRLs |
| | Accurate data based on inputs |
| | Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: A pair of complete SOs for the move of a circuit or service element from one valid location to another as described in Section G.3 and Section J.2.10.1.1.4.2 SO for the disconnect from the old location |
| | SO for the installation of the identical service at the new location |

Table 4.2.3.4.4-6. BSS-TS04-06: TSP Order [E.2.1.3.4.6].

| Tubio 4 | .2.3.4.4-0. D00-1004-00. 101 Older [L.2.1.3.4.0]. |
|---------------------------|---|
| Test Scenario | BSS-TS04: Service Ordering |
| Test Case ID | BSS-TS04-06 |
| Test Case Description | TSP Order |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into |
| | contractor BSS |
| Government Input(s) | Service Order (SO) requesting TSP with all required data elements as |
| | described in Section J.2.4 |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: |
| | Service Order Acknowledgment (SOA) |
| | Service Order Confirmation (SOC) |
| | Firm Order Commitment Notice (FOCN) |
| | Service Order Completion Notification (SOCN) |
| Acceptance Criteria | All required CDRLs as defined in Section J.2.4 |
| | Accurate data based on inputs |
| | Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: |
| | A complete SO with a TSP code for one or more services listed |
| | in Section C.2 of the contract |

Table 4.2.3.4.4-7. BSS-TS04-07: Auto-Sold CLINs [E.2.1.3.4.7].

| | Table 4.2.3.4.4 1. Doo 1004 01. Auto-0014 0E1143 [E.2.1.3.4.7]. | |
|------------------------------|---|--|
| Test Scenario | BSS-TS04: Service Ordering | |
| Test Case ID | BSS-TS04-07 | |
| Test Case Description | Auto-Sold CLINs | |
| Requirements Reference(s) | • G.3 | |
| | • J.2.4 | |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into | |
| | contractor BSS | |
| Government Input(s) | Service Order (SO) that includes CLINS with associated Auto-Sold | |
| | CLINs and contains all required data elements as described in Section | |
| | J.2.4 | |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: | |
| | Service Order Acknowledgment (SOA) | |
| | Service Order Confirmation (SOC) | |
| | Firm Order Commitment Notice (FOCN) | |
| | Service Order Completion Notification (SOCN) | |
| Acceptance Criteria | All required CDRLs as defined in Section J.2.4 | |
| | Accurate data based on inputs | |
| | Correct technical aspects | |
| Data Set Description | Each Government-provided test data set will include: | |
| | A complete SO that includes Auto-Sold CLINs for one or more | |
| | services listed in Section C.2 of the contract | |

Table 4.2.3.4.4-8. BSS-TS04-08: Task Order Unique CLINs (TUCs) [E.2.1.3.4.8].

| Test Scenario | BSS-TS04: Service Ordering |
|-------------------------------------|--|
| | |
| Test Case ID | BSS-TS04-08 |
| Test Case Description | Task Order Unique CLINs (TUCs) |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| Prerequisites | TO setup data loaded into contractor BSS |
| · | TO Data defines one or more TUCs |
| | Account Management data loaded into contractor BSS |
| Government Input(s) | Service Order (SO) containing Task Order Unique CLINs (TUCs) and |
| | all required data elements as described in Section J.2.4 |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: |
| | Service Order Acknowledgment (SOA) |
| | Service Order Confirmation (SOC) |
| | Firm Order Commitment Notice (FOCN) |
| | Service Order Completion Notification (SOCN) |
| Acceptance Criteria | All required CDRLs as defined in Section J.2.4 |
| | Accurate data based on inputs |
| | Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: |
| _ a.a. a.a a.a. a.a. a.a. a.a. a.a. | A complete SO containing Task Order Unique CLINs (TUCs) for |
| | one or more services listed in Section C.2 of the contract |
| | one of more services fisted in Section C.2 of the contract |

Reserved [E.2.1.3.4.9]

Table 4.2.3.4.4-9. BSS-TS04-10: Bulk Orders [E.2.1.3.4.10].

| Test Scenario | BSS-TS04: Service Ordering |
|------------------------------|--|
| Test Case ID | BSS-TS04-10 |
| Test Case Description | Bulk Orders |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into |
| | contractor BSS |
| Government Input(s) | Bulk Service Order (SO) with all required data elements as described |
| | in Section J.2.4 |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: |
| | Service Order Acknowledgment (SOA) |
| | Service Order Confirmation (SOC) |
| | Firm Order Commitment Notice (FOCN) |
| | Service Order Completion Notification (SOCN) |
| Acceptance Criteria | All required CDRLs as defined in Section J.2.4 |
| | Accurate data based on inputs |
| | Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: |
| | A SO including at least 20 line items for services listed in Section |
| | C.2 of the contract |
| | SO data provided via a delimited text file or MS Excel file |

Table 4.2.3.4.4-10. BSS-TS04-11: Error Checking: Missing Info [E.2.1.3.4.11].

| 1 UDIC 7.2.3.7.7-10. | B33-1304-11. Ellor Checking. Missing lino [E.Z.1.3.4.11]. |
|---------------------------|---|
| Test Scenario | BSS-TS04: Service Ordering |
| Test Case ID | BSS-TS04-11 |
| Test Case Description | Error Checking: Missing Information |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into |
| | contractor BSS |
| Government Input(s) | Service Order (SO) missing one or more required data elements as |
| | described in Section J.2.4 |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: |
| | Service Order Acknowledgment (SOA) |
| | Service Order Rejection Notice (SORN) |
| Acceptance Criteria | All required CDRLs |
| | Accurate data based on inputs |
| | Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: SO missing one or more required data elements for one or more services listed in Section C.2 of the RFP? |

Table 4.2.3.4.4-11. BSS-TS04-12: Error Checking: Invalid Info [E.2.1.3.4.12].

| Test Scenario | BSS-TS04: Service Ordering |
|---------------------------|--|
| Test Case ID | BSS-TS04-12 |
| Test Case Description | Error Checking: Invalid Info |
| Requirements Reference(s) | • G.3 • J.2.4 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS |
| Government Input(s) | Service Order (SO) with one or more invalid data elements as described in Section J.2.4 |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: Service Order Acknowledgment (SOA) Service Order Rejection Notice (SORN) |
| Acceptance Criteria | All required CDRLsAccurate data based on inputsCorrect technical aspects |
| Data Set Description | Each Government-provided test data set will include: SO orders with one or more invalid data information for one or more services listed in Section C.2 of the contract |
| | Invalid data can include improperly formatted data or data that is inconsistent with the TO or Account Management data |

4.2.3.4.5 BSS-TS05: Supplements to In-Progress Orders [E.2.1.3.5]

Verizon will test the following test cases under this test scenario

Table 4.2.3.4.5-1. BSS-TS05-01: Cancel Orders [E.2.1.3.5.1].

| Test Scenario | BSS-TS05: Supplements to In-Progress Orders |
|------------------------------|--|
| Test Case ID | BSS-TS05-01 |
| Test Case Description | Cancel Orders |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| | • J.2.10.1.1.4.3 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded |
| | into contractor BSS |
| Government Input(s) | Service Order (SO) with all required data elements as described in |
| | Section J.2.4 |
| | Service Order (SO) for a cancellation of the previous order with all |
| | required data elements as described in Section J.2.4 issued prior to |
| | completion of the previous order |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: |
| | Service Order Acknowledgment (SOA) |
| | Updates to Service Order Confirmation (SOC) if required |
| | Updates to Firm Order Commitment Notice (FOCN) if required |
| | Service Order Completion Notification (SOCN) |
| Acceptance Criteria | All required CDRLs |
| | Accurate data based on inputs |
| | Correct technical aspects |

| Test Scenario | BSS-TS05: Supplements to In-Progress Orders |
|-----------------------|--|
| Test Case ID | BSS-TS05-01 |
| Test Case Description | Cancel Orders |
| Data Set Description | Each Government-provided test data set will include: A complete SO for one or more services listed in Section C.2 of the contract |
| | A second SO canceling the first Service Order as defined in Section J.2.10.1.1.4.3 |
| | The Cancel Order may be issued before or after the deadline described in Section G.3 |

Table 4.2.3.4.5-2. BSS-TS05-02: Service Feature Change [E.2.1.3.5.2].

| Table 4.2.3.4.5-2. BSS-1505-02: Service Feature Change [E.2.1.3.5.2]. | |
|---|--|
| Test Scenario | BSS-TS05: Supplements to In-Progress Orders |
| Test Case ID | BSS-TS05-02 |
| Test Case Description | Service Feature Change |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| | • J.2.10.1.1.4.3 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS |
| Government Input(s) | Service Order (SO) with all required data elements as described in |
| | Section J.2.4 |
| | Service Order (SO) for a service feature change to the previous |
| | order with all required data elements as described in Section J.2.4 issued prior to completion to previous order |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: |
| Expected Output(s) | Service Order Hotilication CDRLs as defined in Section 3.2.4. Service Order Acknowledgment (SOA) |
| | Updates to Service Order Confirmation (SOC) if required |
| | Updates to Firm Order Commitment Notice (FOCN) if required |
| | Service Order Completion Notification (SOCN) |
| Acceptance Criteria | All required CDRLs |
| | Accurate data based on inputs |
| | Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: A complete SO for one or more services listed in Section C.2 of the contract |
| | A second SO describing a service feature change to the first Service Order as defined in Section J.2.10.1.1.4.3 |

Table 4.2.3.4.5-3. BSS-TS05-03: Location Change [E.2.1.3.5.3].

| Test Scenario | BSS-TS05: Supplements to In-Progress Orders |
|---------------------------|--|
| Test Case ID | BSS-TS05-03 |
| Test Case Description | Location Change |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| | • J.2.10.1.1.4.3 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded |
| | into contractor BSS |

| Test Scenario | BSS-TS05: Supplements to In-Progress Orders |
|-----------------------|--|
| Test Case ID | BSS-TS05-03 |
| Test Case Description | Location Change |
| Government Input(s) | Service Order (SO) with all required data elements as described in Section J.2.4 Service Order (SO) for a location change to the previous order with all required data elements as described in Section J.2.4 issued prior to completion to previous order |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: Service Order Acknowledgment (SOA) Updates to Service Order Confirmation (SOC) if required Updates to Firm Order Commitment Notice (FOCN) if required Service Order Completion Notification (SOCN) |
| Acceptance Criteria | All required CDRLsAccurate data based on inputsCorrect technical aspects |
| Data Set Description | Each Government-provided test data set will include: A complete SO for one or more services listed in Section C.2 of the contract A second SO describing a location change to the first Service Order as defined in Section J.2.10.1.1.4.3 |

Table 4.2.3.4.5-4. BSS-TS05-04: Change to Customer Want Date [E.2.1.3.5.4].

| l able 4.2.3.4.5-4. B | SS-TS05-04: Change to Customer Want Date [E.2.1.3.5.4]. |
|---------------------------|---|
| Test Scenario | BSS-TS05: Supplements to In-Progress Orders |
| Test Case ID | BSS-TS05-04 |
| Test Case Description | Change to Customer Want Date |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| | • J.2.10.1.1.4.3 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS |
| Government Input(s) | Service Order (SO) with all required data elements as described in Section J.2.4 Service Order (SO) for a change to the Customer Want Date for the previous order with all required data elements as described in Section J.2.4 issued prior to completion of the previous order |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: Service Order Acknowledgment (SOA) Updates to Service Order Confirmation (SOC) if required Updates to Firm Order Commitment Notice (FOCN) if required Service Order Completion Notification (SOCN) |
| Acceptance Criteria | All required CDRLsAccurate data based on inputsCorrect technical aspects |

| Test Scenario | BSS-TS05: Supplements to In-Progress Orders |
|-----------------------|--|
| Test Case ID | BSS-TS05-04 |
| Test Case Description | Change to Customer Want Date |
| Data Set Description | Each Government-provided test data set will include: A complete SO for one or more services listed in Section C.2 of the contract |
| | A second SO describing a change to the Customer Want Date for the first Service Order as defined in Section J.2.10.1.1.4.3 |
| | The Customer Want Date Change Order may be issued before or after the deadline described in Section G.3 |

Table 4.2.3.4.5-5. BSS-TS05-05: Change to Administrative Data [E.2.1.3.5.5].

| Test Scenario | BSS-TS05-05. Change to Administrative Data [E.Z. 1.5.5.5]. |
|---|---|
| | BSS-TS05: Supplements to In-Progress Orders |
| Test Case ID | BSS-TS05-05 |
| Test Case Description | Change to Administrative Data |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| | • J.2.10.1.1.4.3 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into |
| | contractor BSS |
| Government Input(s) | Service Order (SO) with all required data elements as described in |
| | Section J.2.4 |
| | Service Order (SO) for a change to the administrative data for the |
| | previous order with all required data elements as described in Section |
| - · · · · · · · · · · · · · · · · · · · | J.2.4 issued prior to completion of the previous order |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: |
| | Service Order Acknowledgment (SOA) |
| | Updates to Service Order Confirmation (SOC) if required |
| | Updates to Firm Order Commitment Notice (FOCN) if required |
| | Service Order Completion Notification (SOCN) |
| Acceptance Criteria | All required CDRLs |
| | Accurate data based on inputs |
| | Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: |
| | A complete SO for one or more services listed in Section C.2 of |
| | the contract |
| | A second SO describing a change to the administrative data for the first Service Order as defined in Section J.2.10.1.1.4.3 |

Verizon will test the following test cases under this test scenario.

Table 4.2.3.4.5-6. BSS-TS06-01: Administrative Change Order [E.2.1.3.6.1].

| Test Scenario | BSS-TS06: Administrative Change Order |
|---------------------------|--|
| Test Case ID | BSS-TS06-01 |
| Test Case Description | Administrative Change Order |
| Requirements Reference(s) | • G.3 • J.2.4 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS One or more previously provisioned orders |
| Government Input(s) | Administrative Change Order that specifies a change to the administrative data associated with a previously provisioned service as described in Section G.3 |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: Service Order Administrative Change (SOAC) |
| Acceptance Criteria | All required CDRLs Accurate data based on inputs Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: A complete administrative change order for a change to the administrative data for a previously provisioned service as described in Section G.3 |

4.2.3.4.6 BSS-TS07: Rapid Provisioning & Self-Provisioning Orders [E.2.1.3.7]

Verizon will test the following test cases under this test scenario.

Table 4.2.3.4.6-1. BSS-TS07-01: Rapid Provisioning Orders [E.2.1.3.7.1].

| Test Scenario | BSS-TS07: Rapid Provisioning & Self-Provisioning Orders |
|---------------------------|---|
| Test Case ID | BSS-TS07-01 |
| Test Case Description | Rapid Provisioning Orders |
| Requirements Reference(s) | G.3G.5.3.1J.2.4 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS |
| Government Input(s) | Service Order (SO) for one or more services subject to rapid provisioning as defined in Section G.3 with all required data elements as described in Section J.2.4 |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: Service Order Acknowledgment (SOA) if provisioning requires more than 24 hours Service Order Completion Notification (SOCN) |
| Acceptance Criteria | All required CDRLs as defined in Section J.2.4 Accurate data based on inputs Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: A complete SO for one or more services subject to rapid provisioning as defined in Section G.3 |

Table 4.2.3.4.6-2. BSS-TS07-02: Self-Provisioning Orders [E.2.1.3.7.3].

| Table 4.2.3.4.6- | 2. BSS-TS07-02: Self-Provisioning Orders [E.2.1.3.7.3]. |
|---------------------------|--|
| Test Scenario | BSS-TS07: Rapid Provisioning & Self-Provisioning Orders |
| Test Case ID | BSS-TS07-02 |
| Test Case Description | Self-Provisioning Orders |
| Requirements Reference(s) | G.3G.5.3.2J.2.4 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS |
| Government Input(s) | Service Order (SO) with all required data elements as described in Section J.2.4 for one or more services that are: Subject to rapid provisioning as defined in Section G.3 |
| | Available for self-provisioning as defined in Section G.3 and Section C.2 |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4: Service Order Acknowledgment (SOA) if provisioning requires more than 24 hours |
| | Service Order Completion Notification (SOCN) |
| Acceptance Criteria | All required CDRLs as defined in Section J.2.4 Accurate data based on inputs Correct technical aspects |
| Data Set Description | Each Government-provided test data set will include: Service Order (SO) with all required data elements as described in Section J.2.4 for one or more services that are subject to rapid provisioning as defined in Section G.3 and that are available for self-provisioning as defined in Section G.3 and Section C.2 |

Table 4.2.3.4.6-3. BSS-TS07-03: Self-Provisioning Orders: Error Checking [E.2.1.3.7.3]

| Test Scenario | BSS-TS07: Rapid Provisioning & Self-Provisioning Orders |
|---------------------------|---|
| Test Case ID | BSS-TS07-03 |
| Test Case Description | Self-Provisioning Orders: Error Checking |
| Requirements Reference(s) | G.3G.5.3.2J.2.4 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS |
| Government Input(s) | Service Order (SO) for one or more services subject to rapid provisioning as defined in Section G.3 and available for self-provisioning Populated via Contractors Portal with one or more missing or invalid data elements as described in Section J.2.4 |
| Expected Output(s) | Service Order notification CDRLs as defined in Section J.2.4 Service Order Rejection Notice (SORN) User is shown error message indicating failure |
| Acceptance Criteria | All required CDRLs as defined in Section J.2.4 Accurate data based on inputs Correct technical aspects Appropriate errors are displayed |

| Test Scenario | BSS-TS07: Rapid Provisioning & Self-Provisioning Orders |
|-----------------------|---|
| Test Case ID | BSS-TS07-03 |
| Test Case Description | Self-Provisioning Orders: Error Checking |
| Data Set Description | Each Government-provided test data set will include: Service Order (SO) with all required data elements as described in Section J.2.4 for one or more services that are subject to rapid provisioning as defined in Section G.3 and that are available for self-provisioning as defined in Section G.3 and Section C.2 SO to be provided via Contractors Portal |

4.2.3.4.7 BSS-TS08: Inventory and Billing [E.2.1.3.8]

Verizon will test the following test cases under this test scenario.

Table 4.2.3.4.7-1. BSS-TS08-01: Inventory Reconciliation [E.2.1.3.8.1].

| Test Scenario | BSS-TS08: Inventory and Billing |
|---------------------------|---|
| | , |
| Test Case ID | BSS-TS08-01 |
| Test Case Description | Inventory Reconciliation |
| Requirements Reference(s) | • G.7 |
| | • J.2.7 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded |
| | into contractor BSS |
| | One or more previously provisioned orders |
| Government Input(s) | • N/A |
| Expected Output(s) | Inventory Reconciliation (IR) CDRLs as described in Section J.2.7 |
| Acceptance Criteria | All required CDRLs |
| | Accurate data based on inputs |
| | Correct technical aspects |
| Data Set Description | N/A, see Prerequisites |

Table 4.2.3.4.7-2. BSS-TS08-02: Billing [E.2.1.3.8.2].

| Test Scenario | BSS-TS08: Inventory and Billing |
|---------------------------|--|
| Test Case ID | BSS-TS08-02 |
| Test Case Description | Billing |
| Requirements Reference(s) | • J.2.5 |
| | • J.2.10 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded |
| | into contractor BSS |
| | One or more previously provisioned orders |
| Government Input(s) | • N/A |
| Expected Output(s) | Billing CDRLs as defined in Section J.2.4: |
| | Billing Invoice (BI) |
| | Tax Detail Report (TAX) |
| | Associated Government Fee Detailed (AGFD) |
| | o AGF EFT Report (ATR) |

| Test Scenario | BSS-TS08: Inventory and Billing |
|-----------------------|---------------------------------|
| Test Case ID | BSS-TS08-02 |
| Test Case Description | Billing |
| Acceptance Criteria | All required CDRLs |
| | Accurate data based on inputs |
| | Correct technical aspects |
| | CDRLs are internally consistent |
| | Complies with calculation rules |

Table 4.2.3.4.7-3. BSS-TS08-03: Usage Based Billing [E.2.1.3.8.3].

| Table 4.2.3.4.7-3. B33-1300-03. Usage Based Billing [E.2.1.3.0.3]. | |
|--|--|
| Test Scenario | BSS-TS08: Inventory and Billing |
| Test Case ID | BSS-TS08-03 |
| Test Case Description | Usage Based Billing |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS |
| | One or more previously usage based provisioned orders |
| Government Input(s) | Sample usage data for one or more UBI based on Usage Based CLIN(s) |
| Expected Output(s) | Billing CDRLs as defined in Section J.2.4: |
| | Billing Invoice (BI) |
| | Tax Detail Report (TAX) |
| | Associated Government Fee Detailed (AGFD) |
| | AGF EFT Report (ATR) |
| Acceptance Criteria | All required CDRLs |
| | Accurate data based on inputs |
| | Correct technical aspects |
| | CDRLs are internally consistent |
| | Complies with calculation rules |

Table 4.2.3.4.7-4. BSS-TS08-04: Billing Adjustments [E.2.1.3.8.4].

| Test Scenario | BSS-TS08: Inventory and Billing |
|---------------------------|---|
| Test Case ID | BSS-TS08-04 |
| Test Case Description | Billing Adjustments |
| Requirements Reference(s) | • G.4 • J.2.5 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS One or more previously provisioned orders At least one previously submitted Billing Invoice (BI) |
| Government Input(s) | Sample adjustment request to change or modify a billing line item |
| Expected Output(s) | Billing Adjustment (BA) as defined in Section J.2.5: Reflects requested adjustment |
| Acceptance Criteria | All required CDRLsAccurate data based on inputsCorrect technical aspects |

| Test Scenario | BSS-TS08: Inventory and Billing |
|-----------------------|--|
| Test Case ID | BSS-TS08-04 |
| Test Case Description | Billing Adjustments |
| Data Set Description | Each government-provided test data set will include: Sample adjustment request to change or modify a billing line item |

4.2.3.4.8 BSS-TS09: Dispute Handling [E.2.1.3.9]

Verizon will test the following test cases under this test scenario.

Table 4.2.3.4.8-1. BSS-TS09-01: Government Initiated Dispute [E.2.1.3.9.1].

| Table 4.2.3.4.8-1. BSS-TS09-01: Government Initiated Dispute [E.2.1.3.9.1]. | |
|---|---|
| Test Scenario | BSS-TS09: Dispute Handling |
| Test Case ID | BSS-TS09-01 |
| Test Case Description | Government Initiated Dispute |
| Requirements Reference(s) | • J.2.3 • J.2.6.3 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS One or more previously provisioned orders At least one previously submitted Billing Invoice (BI) |
| Government Input(s) | Government issues at least 2 Disputes (D) as defined in Section J.2.6 Notification to close a dispute after first Dispute Report is issued (see expected outputs) |
| Expected Output(s) | Dispute Report (DR) Reflects open Disputes A second Dispute Report (DR) Reflects open and closed Disputes |
| Acceptance Criteria | All required CDRLsAccurate data based on inputsCorrect technical aspects |
| Data Set Description | Each Government-provided test data set will include: At least two Disputes (D) Notification to close one or more disputes |

4.2.3.4.9 BSS-TS10: SLA Management [E.2.1.3.10]

Verizon will test the following test cases under this test scenario.

Table 4.2.3.4.9-1. BSS-TS10-01: SLA Reporting [E.2.1.3.10.1].

| Test Scenario | BSS-TS10: SLA Management |
|---------------------------|--|
| Test Case ID | BSS-TS10-01 |
| Test Case Description | SLA Reporting |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into contractor BSS |
| | One or more previously provisioned orders |
| Government Input(s) | Services to show as SLAs met or missed |

| Test Scenario | BSS-TS10: SLA Management |
|-----------------------|---|
| Test Case ID | BSS-TS10-01 |
| Test Case Description | SLA Reporting |
| Expected Output(s) | SLA Report (SLAR) |
| Acceptance Criteria | All required CDRLs |
| | Accurate data based on inputs |
| | Correct technical aspects |
| Data Set Description | Services by UBI to show as SLAs met or missed |

Table 4.2.3.4.9-2. BSS-TS10-02: SLA Credit Request [E.2.1.3.10.2]

| Table 4.2.3.4.9-2. B93-1910-02. SLA Credit Request [E.2.1.3.10.2] | |
|---|--|
| Test Scenario | BSS-TS10: SLA Management |
| Test Case ID | BSS-TS10-02 |
| Test Case Description | SLA Credit Request |
| Requirements Reference(s) | • G.3 |
| | • J.2.4 |
| | • J.2.10.3.1.19 |
| Prerequisites | TO controlled, TO associated, and System Reference data loaded into |
| | contractor BSS |
| | One or more previously provisioned orders |
| | At least one previously submitted Billing Invoice (BI) |
| | SLA Report with at least one SLA missed |
| Government Input(s) | SLA Credit Request (SLACR) |
| Expected Output(s) | SLA Credit Request Response |
| Acceptance Criteria | All required CDRLs |
| | Each CDRL meets requirements |
| Data Set Description | Each Government-provided test data set will include: |
| | SLA Credit Request |

4.2.3.4.10 BSS-TS11: Open-Format Reporting [E.2.1.3.11]

Verizon will test the following test cases under this test scenario.

Table 4.2.3.4.10-1. BSS-TS11-01: Open-Format Reporting: Samples [E.2.1.3.11.1].

| - table hallotte in a control of the | |
|--|------------------------------------|
| Test Scenario | BSS-TS11-01: Open-Format Reporting |
| Test Case ID | BSS-TS11-01 |
| Test Case Description | Open-Format Reporting: Samples |
| Requirements Reference(s) | • G.4 |
| | • G.5 |
| | • J.2.10.3.1.13 |
| | • J.2.10.3.1.24 |
| | • J.2.10.3.1.25 |
| Prerequisites | N/A |
| Government Input(s) | • N/A |

| Test Scenario | BSS-TS11-01: Open-Format Reporting |
|-----------------------|--|
| Test Case ID | BSS-TS11-01 |
| Test Case Description | Open-Format Reporting: Samples |
| Expected Output(s) | Sample copies of the contractor's standard reports for: Monthly Billing Information Memorandum Trouble Management Incident Performance Report |
| | Describes service outage or degradation that are user initiated and/or automated monitoring created reports Trouble Management Performance Summary Report |
| Acceptance Criteria | Each CDRL meets requirements |
| Data Set Description | • N/A |

4.2.3.4.11 BSS-TS12: Regression Testing [E.2.1.3.12]

Verizon will test the following test cases under this test scenario after initial deployment.

Table 4.2.3.4.11-1. BSS-TS12-01: Regression Testing [E.2.1.3.12.1].

| Table 4.2.0.4.11 1. Doo Totz of. Regression resting [E.z. 1.0.12.1]. | |
|--|---|
| Test Scenario | BSS-TS12: Regression Testing |
| Test Case ID | BSS-TS12-01 |
| Test Case Description | Regression Testing: Test Cases TBD |
| Requirements Reference(s) | • G.5.5 |
| Prerequisites | Contractor BSS has completed Development testing and ATO |
| Note | Inputs, outputs, acceptance criteria and datasets to be determined based on Change Management provided in G.5.5 Additional test cases may be defined as needed |
| NOTE: It was agreed in meetings with GSA that regression testing would only need to be conducted on changes made to services, features, systems, etc. post BSS Verification Testing. | |

4.2.3.4.12 BSS-TS13: Security Testing [E.2.1.3.13]

Table 4.2.3.4.12-1. BSS-TS13-01: Security Testing [E.2.1.3.13.1].

| Table 4.2.3.4.12-1. DOS-13-01. Security Testing [L.2.1.3.13.1]. | | |
|---|---|--|
| Test Scenario | BSS-TS13: Security Testing | |
| Test Case ID | BSS-TS13-01 | |
| Test Case Description | Security Testing | |
| Requirements Reference(s) | • G.5.6 | |
| Prerequisites | Defined in Section G.5.6 and references therein | |
| Government Input(s) | Defined in Section G.5.6 and references therein | |
| Expected Output(s) | Defined in Section G.5.6 and references therein | |
| Acceptance Criteria | Contractor BSS receives ATO | |
| Data Set Description | Defined in Section G.5.6 and references therein | |

4.2.3.5 Test Results [E.2.1.4]

Successful Acceptance Criteria. Verizon will demonstrate that it successfully meets the BSS acceptance criteria for the various test scenarios/test cases defined in RFP Sections E.2.1.2 and E.2.1.3. Verizon will provide test results that provide detail on:

- Functional requirements for the Ordering, Billing, Inventory Management, Disputes, SLA Management and trouble ticketing processes as described in RFP Sections G and J.2.
- System-to-system data exchange mechanism requirements defined in RFP Section
 G.5 for each CDRLs defined in RFP Section J.2.
- Mandatory data elements for each CDRL defined in RFP Section J.2.10 Data Dictionary are populated and accurate.
- Available optional data elements for each CDRL defined in RFP Section J.2.10 Data Dictionary are populated and accurate.
- Timely and successful system to system data exchange to meet defined performance SLAs and provisioning intervals.

Minimum Testing Requirements. Upon completion of each test case, Verizon will document the outcome and provide the results to GSA (note: multiple test cases may be delivered at a time for review). The results documentation will include, at a minimum, the following fields:

- Test scenario #
- Test case #
- Test Data Set #
- Test #

- Date of Test performed
- Acceptance Criteria
- Test Result (Pass/Fail)

4.2.4 **DELIVERABLES** [E.2.1.5]

4.2.4.1 Verification Test Plan for Contractor's BSS [E.2.1.5.1]

Verizon will submit a BSS Test Plan based on the following timeline:

- Draft: with Proposal
- Final: 30 days after NTP
- Revisions: 14 days after receipt of Government comments

Verizon's BSS Test Plan will:

- Reflect the test methodology defined in RFP Section E.2.1.
- Include Verizon's approach to testing each test scenario and test case
- Include Verizon's timeline and test sequencing

4.2.4.2 Verification Test Results Report for Contractor's BSS [E.2.1.5.2]

Verizon will provide a BSS Verification Test Results Report that includes analysis of the current testing and a summary table of all previously submitted test results, within seven (7) days of performance of the tests. Verizon understands that the Government reserves 14 days to accept or reject the test results, in part or in whole.

- Verizon will perform test cases with test data sets that failed until they are accepted by the Government.
- Verizon will rerun tests, in part or in whole, as deemed necessary by the Government, to verify that the Government's comments on the test results are satisfactorily addressed.

4.3 Timeline and Test Sequencing

Verizon intends to utilize the test schedule and sequencing illustrated in Figure 4.3 below to complete BSS Verification Testing. Upon receipt of specific BSS Verification testing scenarios, Verizon will update this document, if necessary, and include the changes in the Final BSS Verification Test Plan due 30 days after Notice to Proceed.

