

## ATTACHMENT 3 DRAFT BSS VERIFICATION TEST PLAN

## A3.1 OVERVIEW

The MetTel BSS Verification Test Plan reflects the test methodology described in EIS RFP Section E.2.1 and Section A3.3 of this test plan.

BSS Test Plan Section A3.4 includes MetTel's timeline and test sequencing for all Test Scenarios, Test Cases and test data sets. Testing assumptions are identified and the testing level of effort and test plan execution schedule is described based upon those assumptions and information provided in EIS RFP Section E.2.1. The BSS Test Plan also describes the MetTel Federal BSS test environment, test team composition, and information concerning primary testing location and other locations involved in test activities.

The BSS Test Plan describes MetTel's approach to testing each Test Scenario and Test Case in Section A3.5.

## A3.2 TEST ENVIRONMENT AND LOCATION

## A3.2.1 Test Environment

MetTel's EIS BSS Verification Test Environment is based upon MetTel's successful BSS platform currently used by commercial and Federal customers. The Testing Environment will consist of a version of the MetTel Federal BSS software platform that includes all features required to meet EIS BSS requirements as well as all existing functionality supporting Government and commercial customers. Specific EIS BSS requirements include interfaces to Government systems, support of Task Order specific data and account structures, support for other EIS specific data, existing support for Direct Billed Agencies, integrated SLA reporting, inventory reconciliation reporting, process reporting and billing and payments reporting per EIS requirements.

All testing will be performed on the actual system to be used in delivering service following successful EIS BSS Verification Testing. This version of the MetTel Federal BSS will become MetTel's production BSS platform. During testing, interfaces that would result in the automated provisioning of service (e.g., external vendor orders or network configuration work orders) or those that are inputs from live service (e.g., service performance data) will be supported by service emulation software modules.



Also during testing, system dates may be manipulated to create a compressed "test system calendar." This will allow a test flow that emulates a minimum of four billing cycles to be accomplished in a much shorter period than "real world time." This capability makes it possible to more closely approximate the relationship and timing of events as they are likely to occur in a production environment.

### A3.2.2 Test Location

#### A3.3 TEST METHODOLOGY

The MetTel Test Methodology is directly based upon the Test Methodology described in EIS RFP Sections E.2.1.1 through E.2.1.5.

#### A3.3.1 Scope

MetTel's EIS BSS Test Methodology will meet the Inspection and Acceptance requirements described in **Exhibit A3-1**.

### Exhibit A3-1. Inspection and Acceptance Requirements

#	Requirement			
1.	BSS testing will verify that all BSS functional, regression and security requirements have been successfully met.			
2.	BSS testing will be performed for all management and operation functions supporting Ordering, Billing, Inventory			
	Management, Disputes, SLA Management and Trouble Ticketing processes descr bed in RFP Sections G and J.2.			
3.	Security testing will be based on the requirements descr bed in EIS RFP Section G.5.6 BSS Security Requirement			
	The security requirements acceptance will be based on:			
	Assessment and Authorization (A&A)			
	FedRAMP certification (if applicable)			
4.	BSS testing will include all test cases that are defined in EIS RFP Section E.2.1.3.			
5.	BSS testing will include test cases for quality, utility and customer access features.			
6.	MetTel will allow government representative(s) to observe all or any part of the verification testing.			
7.	. If the government so requests, MetTel will perform tests to ensure continued compliance each time a new service is			
	offered or MetTel modifies BSS features/functionality that affect the functional requirements described in EIS RFP			
	Sections G and J.2.			
8.	If the government requests this retest, MetTel will provide a BSS Verification Test Results report, including analysis,			
	within seven (7) days after performance of the tests. MetTel acknowledges that the government reserves 14 days to			
	accept or reject the test results, in part or in whole. If the government rejects the test results MetTel will retest until such			
	time the results are acceptable to the government.			
9.	MetTel will perform BSS verification testing according to the accepted BSS Test Plan at a mutually acceptable date with			
	the government.			



### A3.3.2 Testing Pre-Requisites

Prior to initiating BSS testing, MetTel will:

- Provide written notice to the government that MetTel's Federal BSS has passed its internal testing and is ready to begin BSS interface testing with GSA Conexus.
- Provide a finalized BSS Test Plan that is accepted by GSA.

MetTel understands that the purpose of the verification and acceptance testing is to ensure that MetTel's EIS BSS meets requirements in EIS RFP Sections G and J.2. MetTel will support BSS security and functional testing as defined in EIS RFP Sections G.5.6 BSS Security Requirements and G.2.3 BSS Final Contract Acceptance.

## A3.4 TEST SEQUENCING

MetTel's EIS BSS Test Sequencing is designed to provide conditions that represent real-world activity and event sequences. The sequencing is also designed to balance the use of testing resources throughout the entire testing interval.

The MetTel Federal BSS Test Sequence includes a testing period for system, contract and task order setup in the MetTel Federal BSS. This Setup period is followed by Ordering, Billing and Reporting Phases 1 and 2; then by Ordering, Service, Billing and Reporting Phases 3 and 4.

Exhibit A3-2, Exhibit A3-3, Exhibit A3-4 and Exhibit A3-5 illustrate the relationship of the test phases to activities associated with specific test cases.

**Exhibits A3-2** through **A3-5** show the series of processes required in order to prepare the MetTel Federal BSS for accepting and processing orders and other governmental inputs, initiating and billing service and providing the required EIS reports and other outputs.





### Exhibit A3-2. EIS BSS Testing Phase 1







## Exhibit A3-3. EIS BSS Testing Phase 2

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### Exhibit A3-4. EIS BSS Testing Phases 3



### Exhibit A3-5. EIS BSS Testing Phases 4



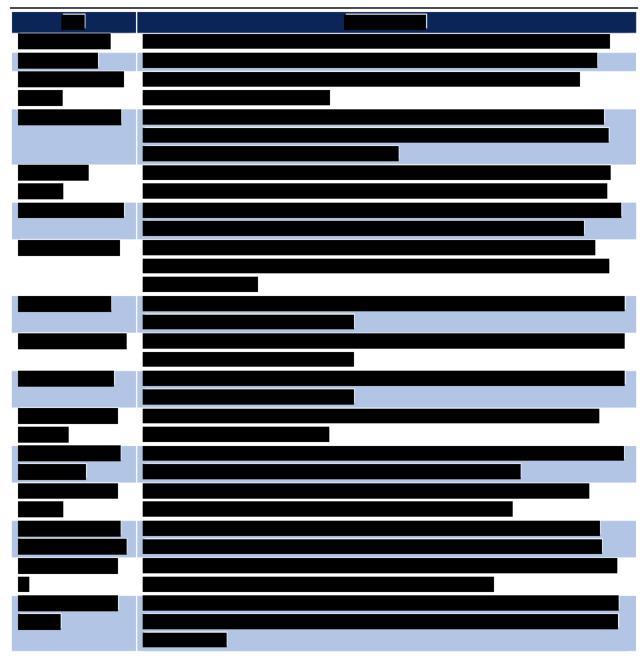
## A3.4.1 Project Planning Information

## A3.4.1.1 Project Planning Principles



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The timeline associated with our BSS verification testing is shown in Exhibit A3-8.





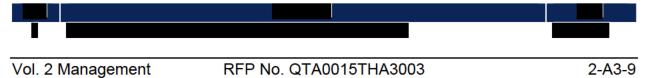
Exhibit A3-8. BSS Verification Testing Timeline

### A3.5 TEST SCENARIO AND TEST CASE APPROACH

This BSS Test Plan section describes MetTel's testing approach to each Test Scenario and the related Test Cases and Test Data Sets. In this section, MetTel presents high-level test scripts for Test Cases. These test scripts are shown in tables and describe the test steps and test criterion for each step.

All MetTel Test Case test steps, shown in **Exhibit A3-9**, include preparation and close out documentation steps in addition to those shown in the individual test case.

### Exhibit A3-9. MetTel Test Steps







If any test step fails, MetTel will identify the cause of failure, resolve any issue and repeat the entire test.

#### A3.5.1 Data Import Testing During Setup Phase of Testing

A significant number of DDE transactions are related to setup processes. The MetTel project plan incorporates the testing of these DDE mechanisms during the Setup Phase. Other DDE processes will be tested in Scenarios related to Billing, SLA Management and Dispute processes. **Test Scenarios BSS-TS01 and BSS-TS02** provide the context for testing DDE via Secure FTP or XML Web Services (i.e., Government-provided).

**BSS-TS01-01** specifies a Government-provided data set using web services as the transfer mechanism in EIS RFP Section J.2. DBAS setup meets this specification. This Test Case may be an initial step in BSS-TS02-01 or BSS-TS02-02.

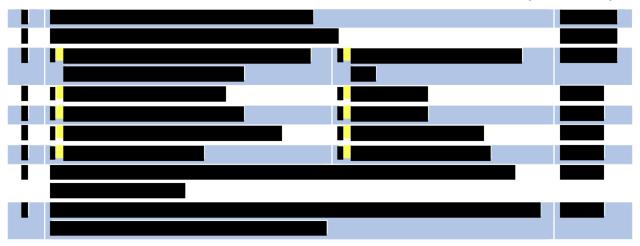


Exhibit A3-10. BSS-TS01-01: DDE/XML over Secure Web Services (E.2.1.3.1.1)





**BSS-TS01-03** concerns an additional possible source of error that could be tested by having a corresponding correct data set submitted after the proper rejection of the errored data set. This would verify that resubmission of corrected data will process properly.



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To properly perform verification of the MetTel Federal BSS and its interfaces to Government systems, it will be necessary for MetTel to gather and load data for all test Task Orders into the BSS. This data includes:

- CLINs Awarded
- Financials
- Country/Jurisdiction Awarded by
  Service
- Officials
- Locations Awarded by Service
- Customer Requirements Document Set
- Proration Type
- Key Performance Indicators
- Services Awarded

The creation of this data in the MetTel Federal BSS will generate uploads for GSA systems. The source of this data is the Government provided data for BSS-TS02-01 and BSS-TS02-02.

As stated in Section 5.1.1, **BSS-TS02-01: Direct Billing Account Setup** Test Case can be a follow-on from BSS-TS01-01.



Exhibit A3-15. Reserved



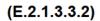
BSS-TS03-01 will be sequenced following BSS-TS02 Test Cases, since that

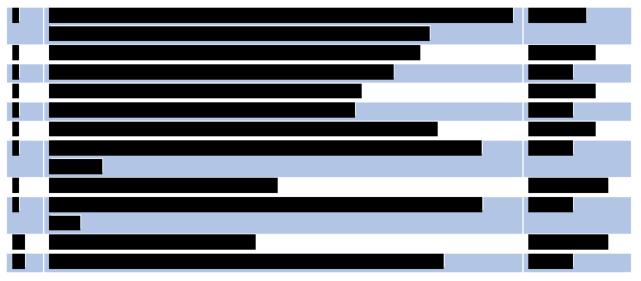
scenario establishes appropriate prerequisite data.



BSS-TS03-02 will follow the successful completion of BSS-TS03-01.

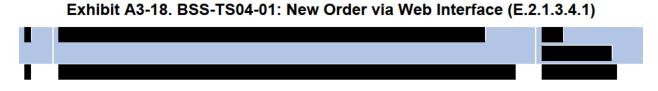
Exhibit A3-17. BSS-TS03-02: Unauthorized User Access Denial Verification



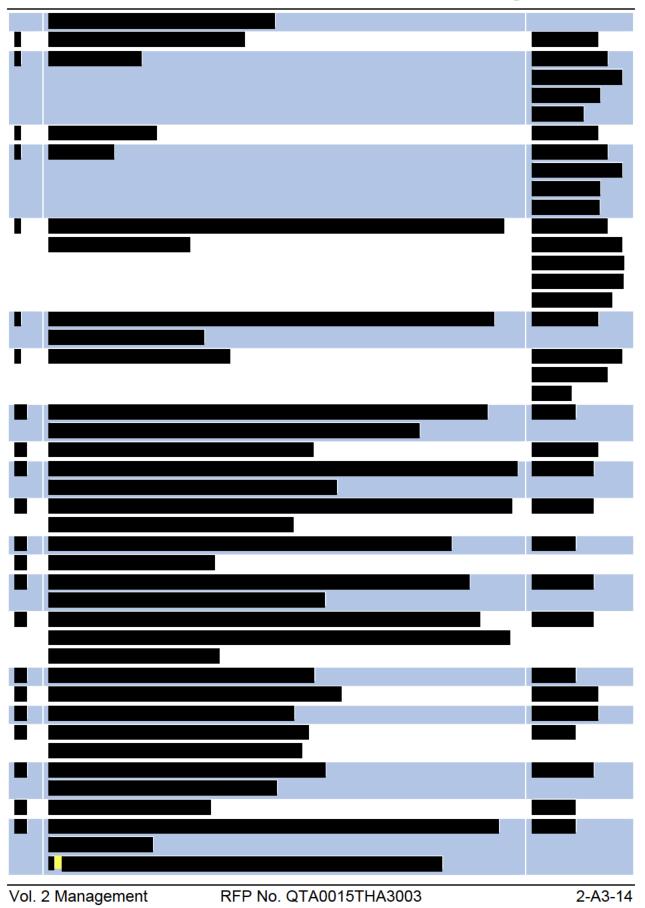


#### A3.5.2 New Orders

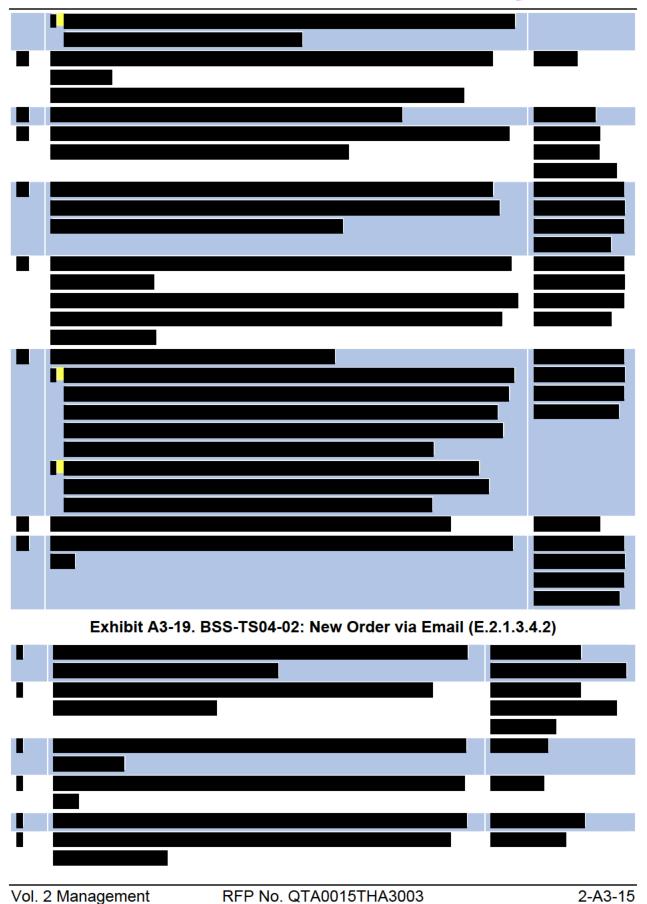
New orders are Test Cases and associated Test Data Sets that are intended to establish new services. MetTel intends to enter the majority of these orders during Order Phase 1. Rapid Provisioning Orders and Self-Provisioning Orders will be entered during Order Phase 2, since these generally have shorter provisioning intervals than standard provisioning orders.









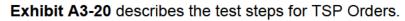


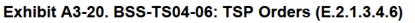














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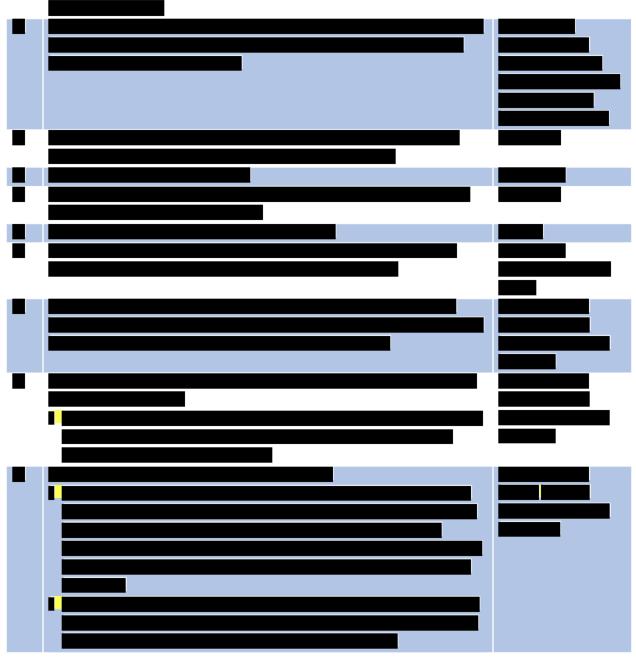
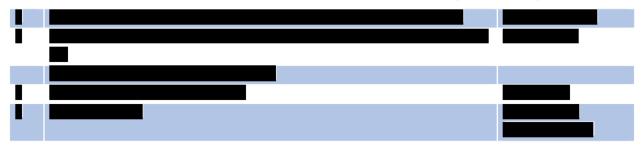


Exhibit A3-21 describes the test steps for orders with Auto-Sold CLINs.

Exhibit A3-21. BSS-TS04-07: Auto-Sold CLINs (E.2.1.3.4.7)



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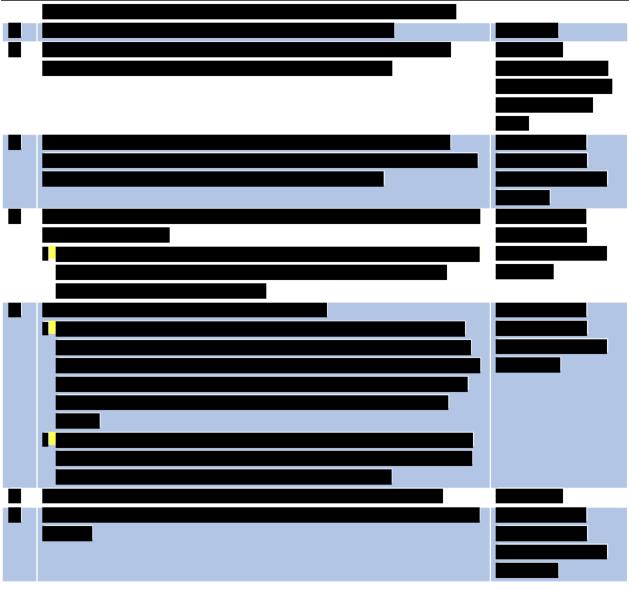
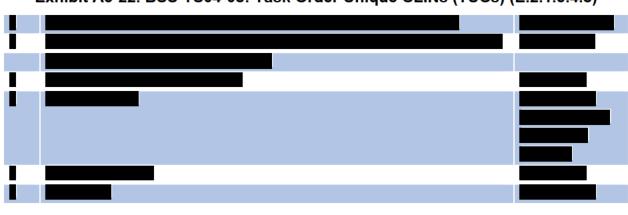


Exhibit A3-22 describes the test steps for orders including TO Unique CLINs

(TUCs):

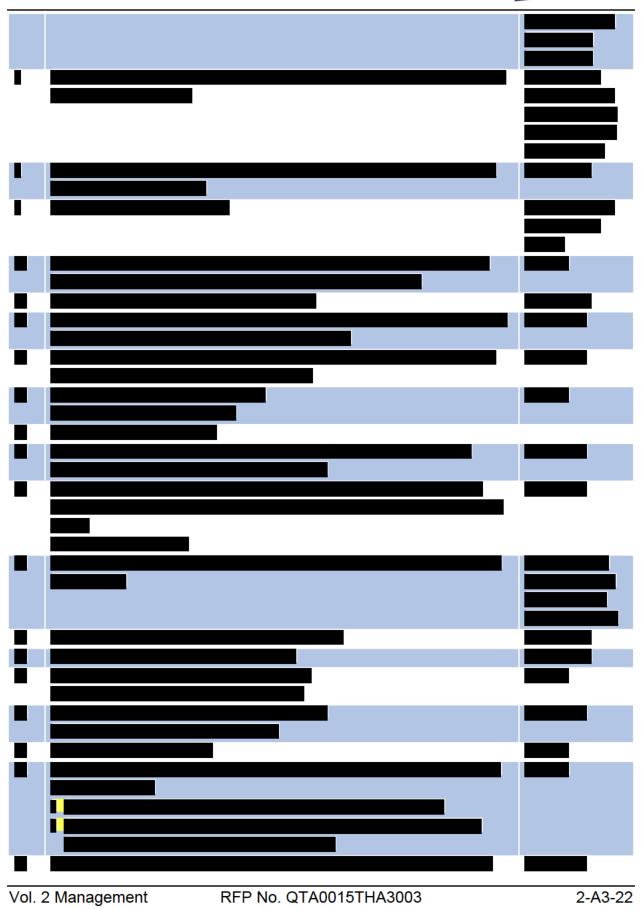


# Exhibit A3-22. BSS-TS04-08: Task Order Unique CLINs (TUCs) (E.2.1.3.4.8)

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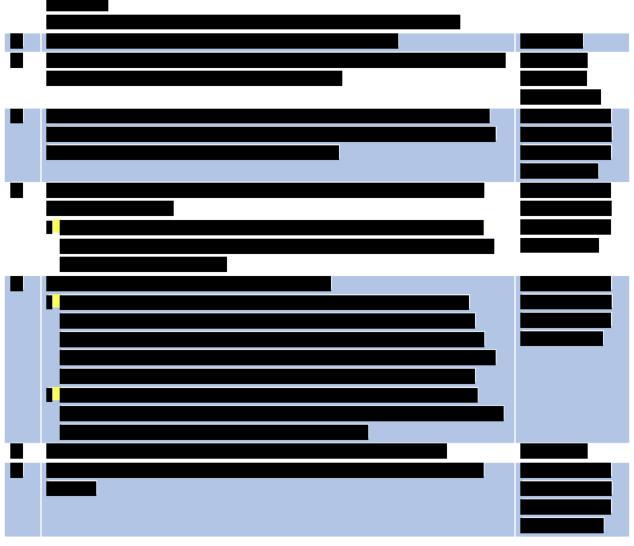
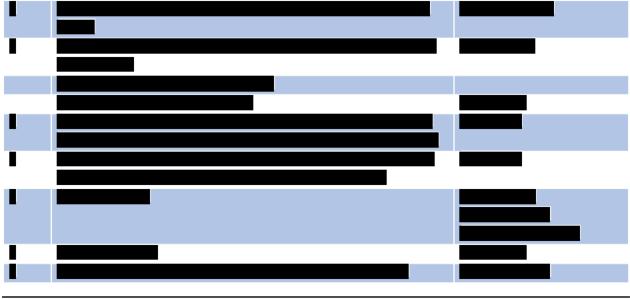


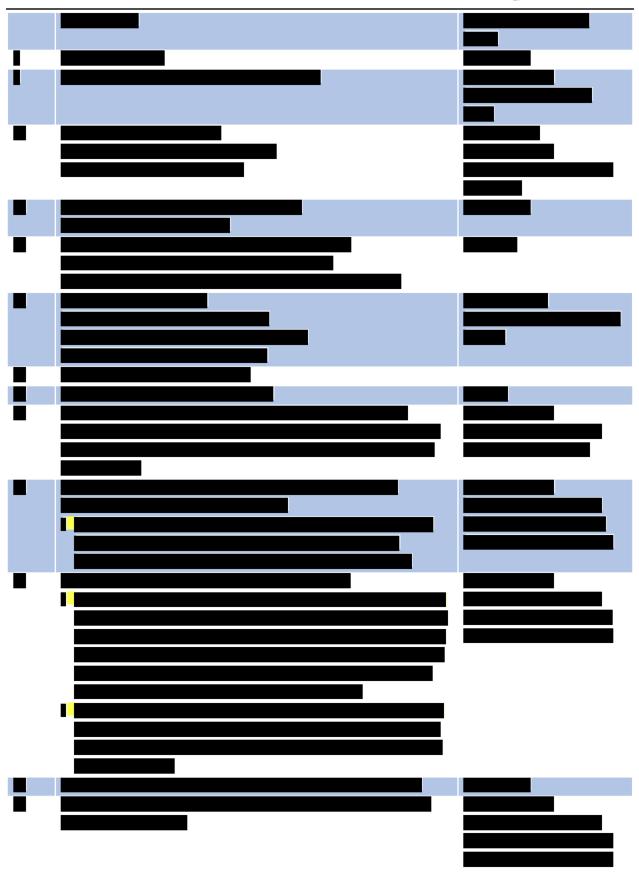
Exhibit A3-23. BSS-TS04-10: Bulk Orders (E.2.1.3.4.10)



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Exhibit A3-24 describes the test steps for Error Checking: Missing Info.

## Exhibit A3-24. BSS-TS04-11: Error Checking: Missing Info (E.2.1.3.4.11)







Exhibit A3-25. BSS-TS04-12: Error Checking: Invalid Info (E.2.1.3.4.12)



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The initial orders to establish a new service associated with Test Scenario BSS-

TS05: Supplements to In-Progress Orders will be processed in Order Phase 1 with a

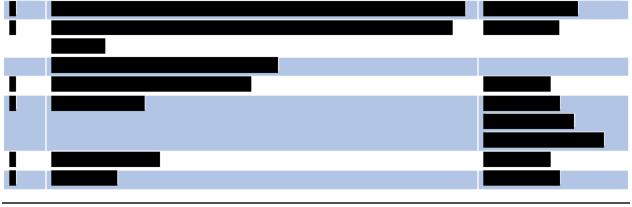
CWD during Order Phase 2 and a restriction on early delivery.



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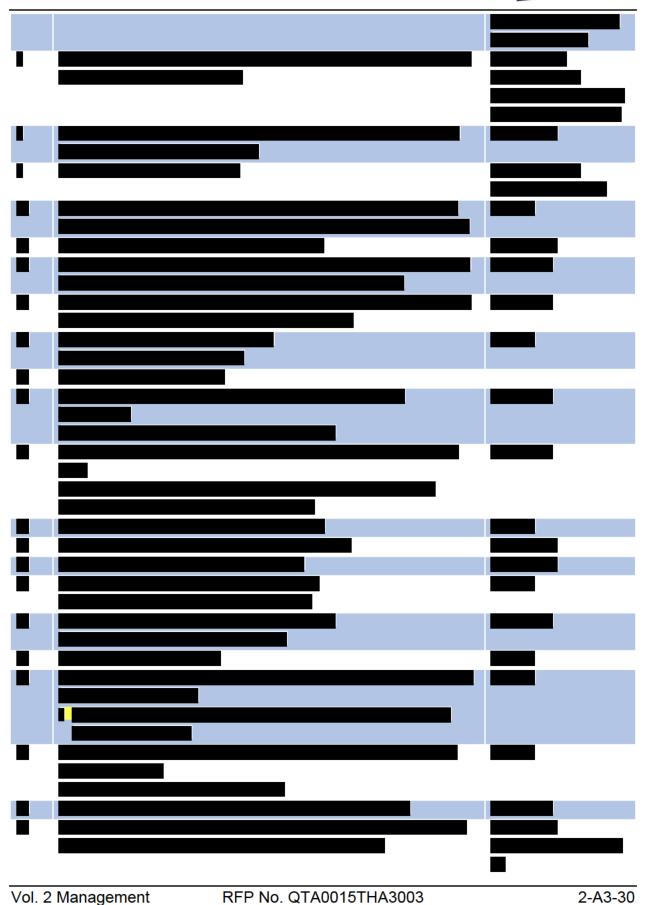
MetTel



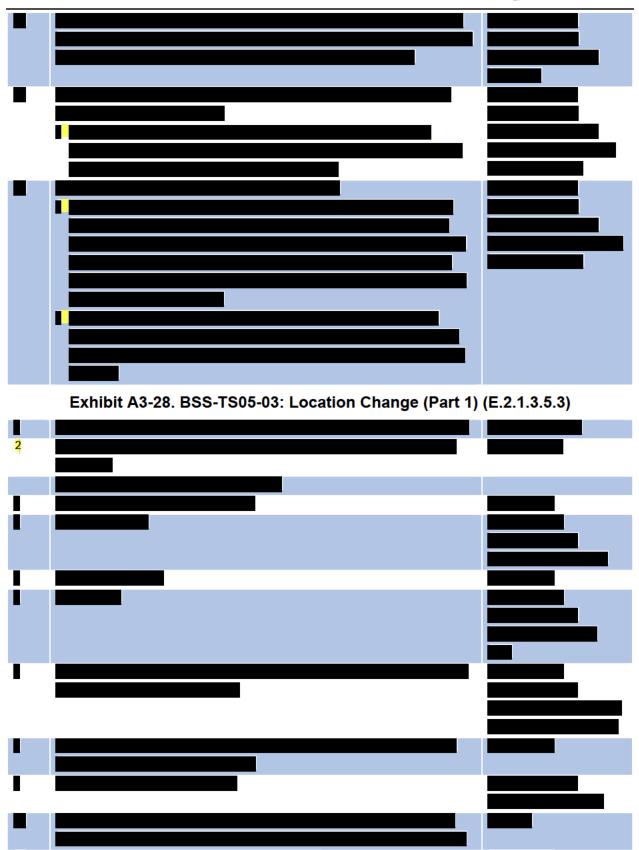
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Exhibit A3.29 BSS-TS05-04: Change to Customer Want Date (Part 1) (E.2.1.3.5.4)

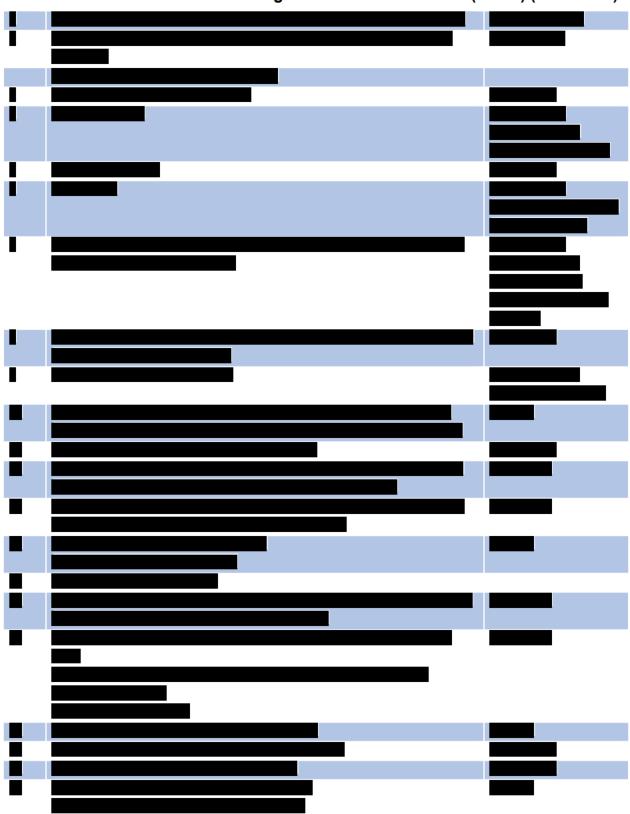








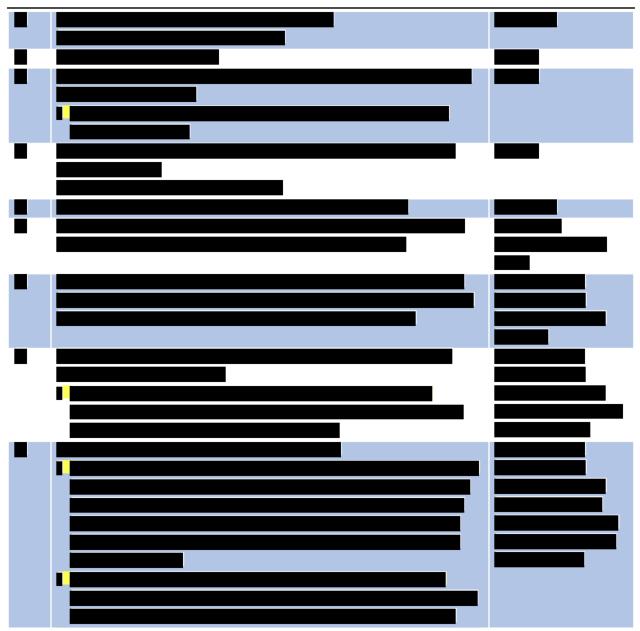
Exhibit A3-30. BSS-TS05-05: Change to Administrative Data (Part 1) (E.2.1.3.5.5)



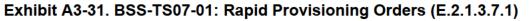
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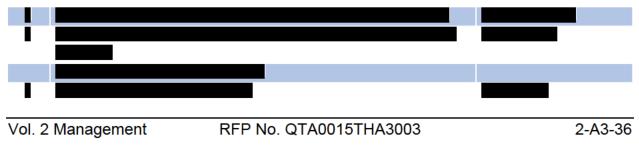
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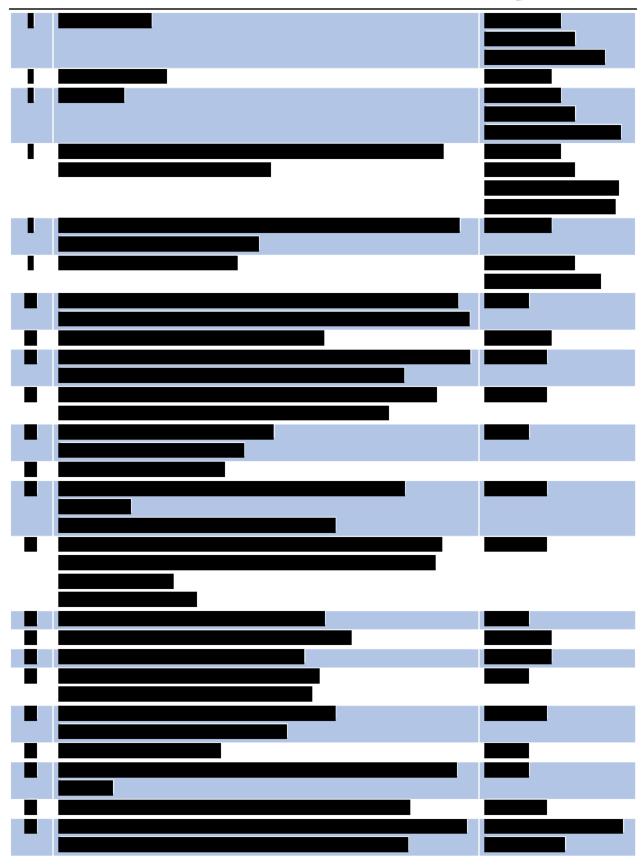


MetTel intends to include Rapid Provisioning and Self-Provisioning orders in Order Phase 2. However, these are new orders so they may be entered in Order Phase 1 if schedule and resources permit. MetTel intends that these orders will complete (issue SOCN) within the Order Phase in which they are entered.









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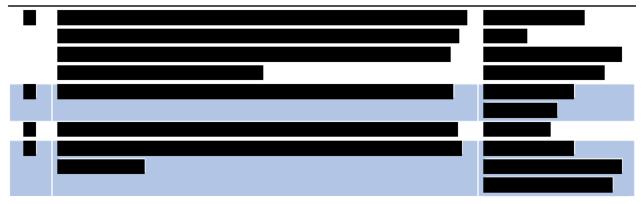
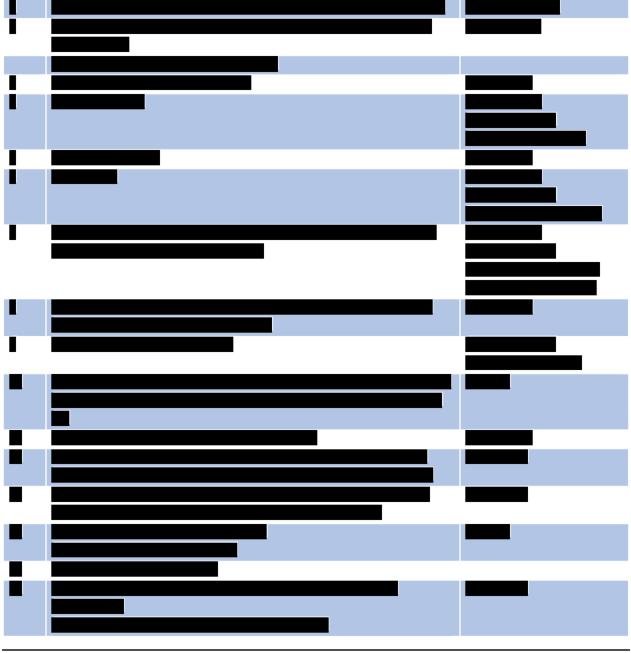


Exhibit A3-32. BSS-TS07-02: Self-Provisioning Orders – (E.2.1.3.7.2)



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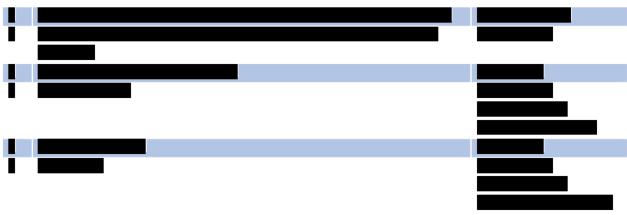
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Exhibit A3-33. BSS-TS07-03: Self-Provisioning Orders: Error Checking -

# (E.2.1.3.7.3)



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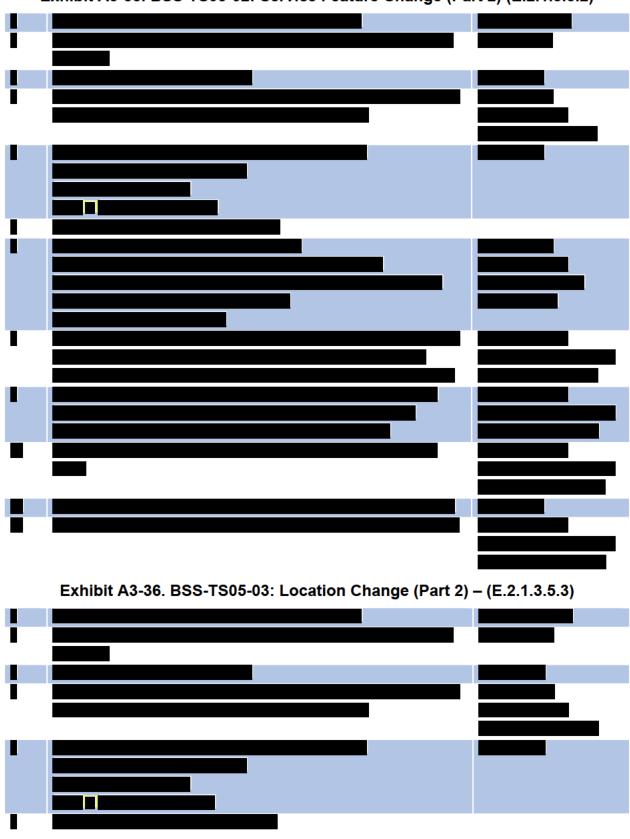
Subsequent Orders A3.5.3 Exhibit A3-34. BSS-TS05-01: Cancel Orders (Part 2) (E.2.1.3.5.1) 

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Exhibit A3-35. BSS-TS05-02: Service Feature Change (Part 2) (E.2.1.3.5.2)



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Exhibit A3-37. BSS-TS05-04: Change to Customer Want Date (Part 2) (E.2.1.3.5.4)

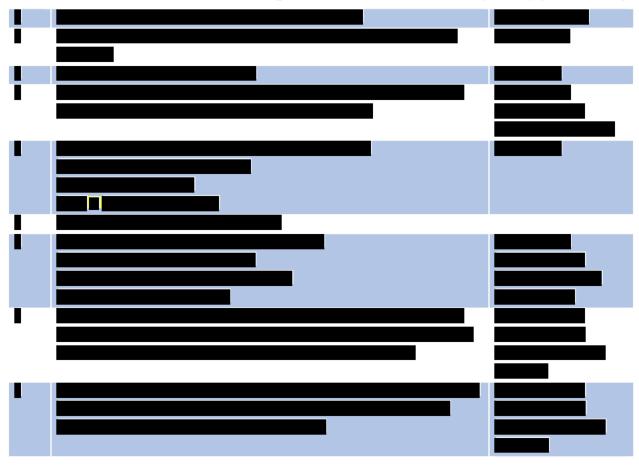
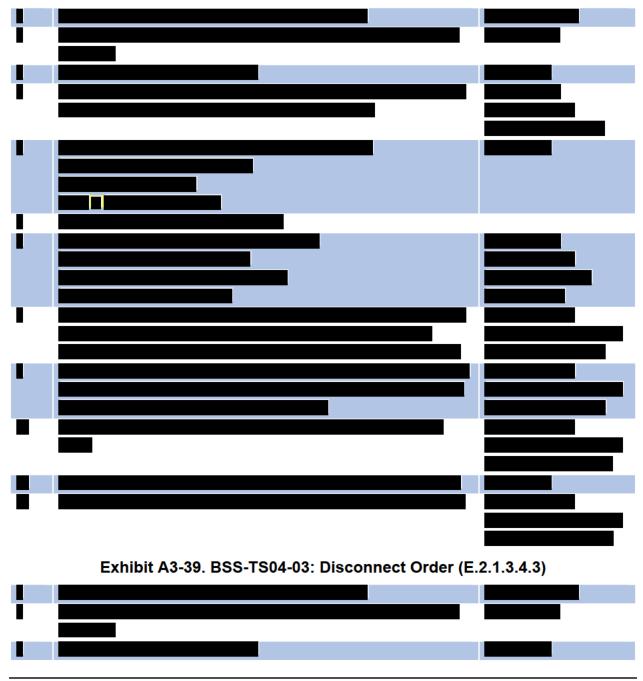




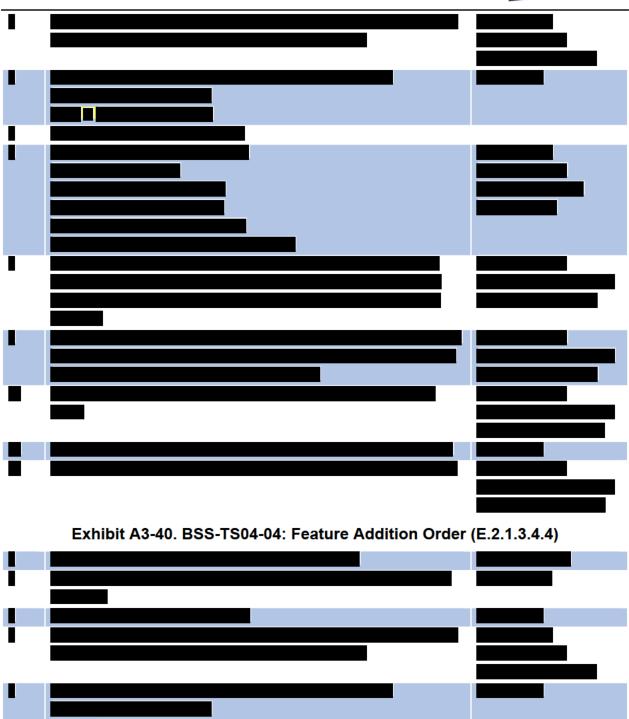


Exhibit A3-38. BSS-TS05-05: Change to Administrative Data (Part 2) (E.2.1.3.5.5)



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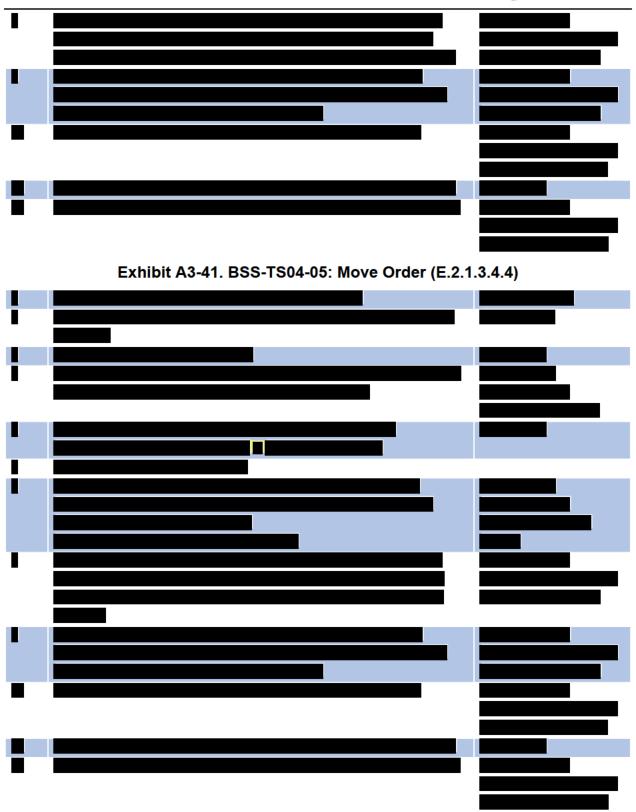




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The Administrative Change Order test data sets will be initiated after the related previously provisioned orders have completed (issued SOCN) and the processing of



those orders have been determined to pass the Acceptance Criteria for that Test

Case/Test Data Set.





#### A3.5.4 Billing

MetTel intends to produce monthly bills for all test Task Orders with active service within each of the "testing month" periods. This will allow MetTel to demonstrate the ability of MetTel's Federal BSS platform to correctly bill first, last and full month service, to reflect service changes, as well as to provide appropriate CDRLs for Direct Billed Accounts.



Exhibit A3-43. BSS-TS08-02: Billing (E.2.1.3.8.2)



Exhibit A3-44 BSS-TS08-03: Usage Based Billing (E.2.1.3.8.2)

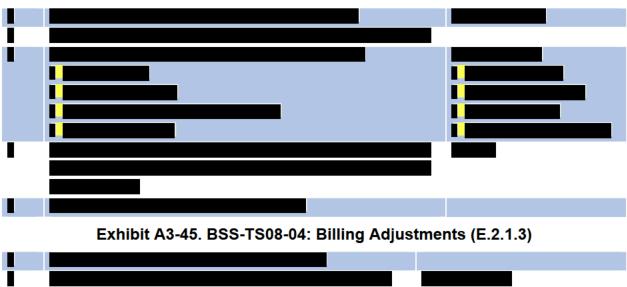
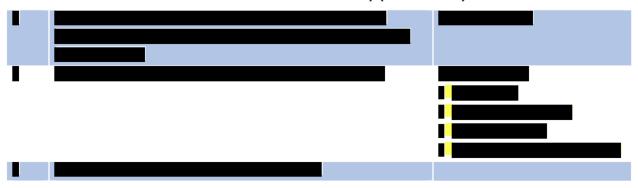




Exhibit A3-46. BSS-TS11-01: Open-Format Reporting: Samples (Monthly Billing Information Memorandum) (E.2.1.3.8.2)

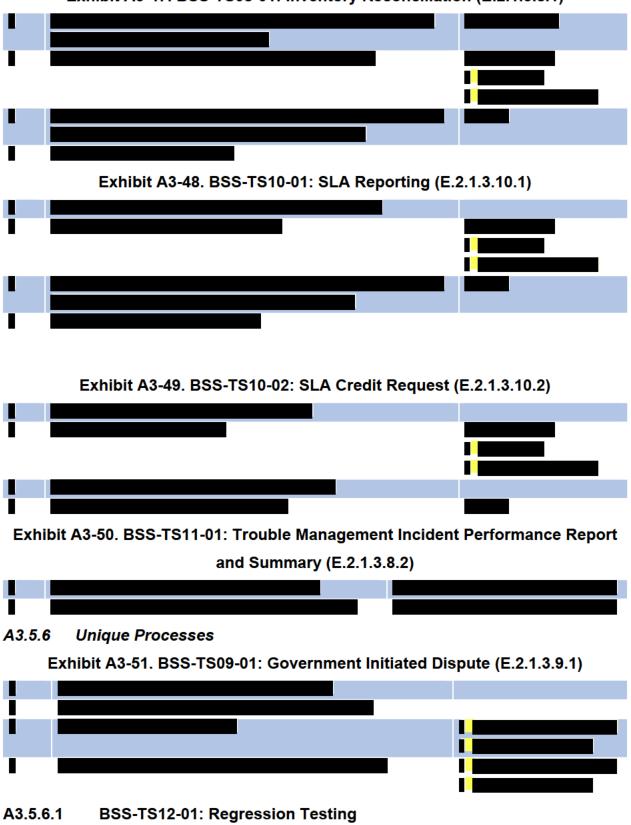


#### A3.5.5 Reporting

MetTel intends to provide an Inventory Reconciliation (IR) report for each test phase. These reports will represent services at the close of each "testing month." This will demonstrate the capability of MetTel's Federal BSS to handle first month and last month service conditions, as well as service changes, month to month. The reports will be generated by the 15th "test calendar day" of the following month.



Exhibit A3-47. BSS-TS08-01: Inventory Reconciliation (E.2.1.3.8.1)





To support future Regression Testing, MetTel will retain all BSS Verification Testing test data sets, detailed procedures and logs and output data and results. This will allow verification that unchanged functionality continues to perform as it did in initial BSS Verification Testing. MetTel will also retain such data from subsequent regression tests.

## A3.5.6.2 BSS-TS13-01: Security Testing

As detailed in ATTACHMENT 7 BSS Risk Management Framework Plan and EIS RFP Section G.5.6, MetTel will participate as required in all Tasks specified in NIST Special Publication 800-37 Guide for the Security Certification and Accreditation of Federal Information Systems and will fulfill all responsibilities identified for the Information System Owner. MetTel BSS will receive ATO per G.5.6. and the SSP

### A3.6 TEST REPORTING

MetTel 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 after performance of the tests. The test results will detail at a minimum the following: Test scenario # / Test case # / Test Data Set # / Test #; Date of Test performed, Acceptance Criteria, Test Result (Pass/Fail) and any other information required to describe the test results as specified in EIS RFP Section E.2.1.4.

MetTel test results will provide details of testing including all bullet items listed in EIS RFP Section E.2.1.4.



MetTel understands that the Government reserves fourteen (14) days to accept or reject the test results, in part or in whole.

- MetTel will perform re-test of test cases with test data sets that failed until they are accepted by the government.
- MetTel 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.