

Appendix E

Testing Process for Certification of Service Providers and Automated Systems

For purposes of this Appendix the following terms and abbreviations are used:

- Testing Central - TC
- Certified Service Provider - CSP
- Certified Automated System - CAS
- Certified Automated System Provider - CAS Provider
- CSP or CAS Applicants - CSP or CAS candidate

A. Purpose of testing.

System testing and certification takes place prior to the Streamlined Sales Tax Governing Board Inc. (SSTGB) executing a contract with a CSP or a CAS provider and testing is ongoing as laws and rules change. The testing process evaluates determination of tax jurisdictions, tax application, exemptions and deductions, tax calculations, and completion and transmission of the SER, including the financial transaction. Ongoing testing reviews systems for accuracy after system changes, updates to tax rules, and boundary and rate table changes.

The SSUTA and contract allow a CSP and Model 2 Seller liability relief in all member states for certain transactions processed by the CSP or a CAS.

Areas not reviewed in the certification process include:

- Set up and integration of the CAS software with the seller's system.
- Mapping of the seller's products to the codes and tax rules of the CSP or CAS.
- Tax rule updates or changes not approved by the state.
- Transactions not processed through the CSP or in a CAS
- Transactions processed during a period when a seller has not timely applied updates.
- Certification may not cover all transactions a Model 2 seller may report on the SER. A Model 2 seller may add items not processed through the CAS and may adjust the amounts reported.

B. Criteria to be Tested.

States will evaluate the following during the testing process.

1. Tax Rules

- a. Products - Taxability and Exemptions
 - i. Tax rule hierarchy among competing rules

- ii. Goods or service based special taxability
 - 1. Caps and Thresholds
 - iii. Delivery charges
 - iv. Sales Tax Holidays
 - 1. Products included
 - 2. Caps and Thresholds
 - 3. Transaction dates
 - b. Entity Exemptions - Taxable or Exempt
 - i. Test Deck contains an indicator showing if a customer is taxable or exempt. It does not test the reason for exemption, the accurate completion of an exemption certificate, or when the exemption certificate is accepted.

Minimum Requirements: The CSP or CAS must have tax rules in place that correspond with State Taxability Matrices.

Test Decks are for testing tax rules for product and administration definitions on the state's tax matrix (SSTGB Form F0014).

States may request a listing of all tax rules from a CSP or CAS provider for their review, as needed.

2. Sourcing - Tax Rates

- a. Determine proper taxing jurisdictions based on the state's destination or origin sourcing rules.
 - i. State Jurisdiction
 - ii. Local Jurisdiction
 - iii. Enterprise Zones
 - iv. Special Taxing Jurisdictions
- c. Determine proper tax rates based on transaction date and jurisdiction.
- d. Determine proper reporting of tax to each jurisdiction.

Minimum Requirement: Jurisdiction information must meet the standard set by state in its Boundary Table. Tax Rates for each jurisdiction must comply with each state's Rate Table. See Rates and Boundary Databases Instructional Paper, August 2005 - in Library on Streamlined salestax.org website (Reference Number IP05006).

3. Tax Calculations

- a. Uniform rounding rules (Section 324, SSUTA)
- b. Returns and credits (test calculation by using a negative sale amount)
- c. Caps and thresholds

4. SER

- a. Completion of SER

- b. Completion of SER Part II - Exemption Information, if required by that state.
- c. Filing of SER to include the transmission to the state using the standard protocol approved by the Governing Board.
- d. Remittance using SER - Test accuracy in completing the financial transaction. No funds are transferred during testing.

Testing the SER is to be completed prior to certification of a CSP or CAS candidate and prior to implementation of changes to the SER Schema.

C. CSP or CAS Self Evaluation Prior to Testing by States.

Testing should begin when:

1. The candidate determines their system is ready,
2. The online system is ready (see section D),
3. A self-evaluation is completed by running a test deck provided by Testing Central (TC) to determine if the system produces the expected results.

D. CSP and CAS Online System.

An online system must be provided by a candidate during the test phase and by the CSP or CAS provider on an ongoing basis to use in day to day testing and testing when changes to the systems are made. This site shall be available 24/7.

Online entry screen. A web-based, password-protected, online entry and upload/download screen shall be available and allow states the capability to enter transactions to test sourcing, tax calculations and verify the results. This functionality allows the individual states to quickly identify problems with the CSP or CAS provider/candidate tax engine to accurately calculate and return a response on a transaction for each individual state and the unique processing requirements for that state's sourcing and taxing rules.

The online screen will have a minimum of the following features as found in most shopping carts:

Invoice date
Order received address
Ship to address
Shipping method
SKU number
Gross sales price
Taxing jurisdiction(s)
Tax rate(s)
Tax calculation

Upload/Download abilities. The web-enabled site must be capable of receiving the test decks as described in section E, computing the output, and return the output files

E. Test Transactions (Test Deck).

The test transactions (Test Deck) are used to review sourcing, tax rates, tax calculations, and product or definition taxability. The test deck also provides data to be used in testing the SER.

The test deck should include both correct and erroneous transactions, which represent the entire range of anticipated errors such as incorrect addresses and missing data.

Test decks should be of sufficient size to accommodate all types of transactions the states can test in this process. The size of the test decks will vary depending on each state's needs. States with a single tax rate may not need to do as much extensive sourcing testing as states with many tax jurisdictions.

States may choose to include all types of transactions in one test deck. A state may also begin testing with a smaller test deck to test sourcing and rates. As testing progresses, the state can include additional transactions to test product taxability and exempt customers or they may choose to utilize multiple test decks. A test deck may test basic boundary and rate issues, complex issues, product taxability or any combination of these issues.

Submission of Test Decks. Test decks are submitted to the CSP or CAS candidate, CSP or CAS provider directly by the state or by TC.

- **Candidate Self-evaluation:** TC will forward test decks and test deck expected results from each state to the candidate for use in evaluating the candidate's system prior to testing by the states.
- **Certification Process:** States will send their test deck to the CSP or CAS candidates as needed.
- **Quarterly Testing:** TC compiles test decks from each state into one test deck. TC sends the test deck to all CSPs by the first of the month prior to the start of each calendar quarter. The quarterly test deck is used to verify changes in new rate and boundary tables posted quarterly and product taxability
- **Ongoing Change Requests:** States will send their test decks to the CSP or CAS provider as needed to verify changes made or requested by the state, CSP, or CAS provider.

File Format: The Test Deck will be in a comma delimited text format (.csv) with no header row. Do not embed any commas in any field.

The test deck fields, format, record length, and required order are listed below.

Field Number	Field Name	Description	Format	Length	Mandatory Field
1	Date	Transaction date	YYYYMMDD	8	N
2	Record Number	Identifying number	Numeric	8	Y
3	Seller SSTID	Seller SSTID	Alpha/Numeric	9	Y
4	Seller Location ID	Seller location ID	Alpha/Numeric	9	N
5	Seller State	State where seller is located	Alpha	2	N
6	Delivery Method	Is delivery in seller vehicle?	Y/N	1	N
7	Customer Entity Code	Is customer taxable?	T/E	1	Y
8*	Order Received Address	Street name, number, or PO Box	Alpha/Numeric	40	N
9*	Order Received Suite	Suite, Apt, Lot	Alpha/Numeric	40	N
10*	Order Received City	Name of city	Alpha	40	N
11*	Order Received State	2 character state abbreviation	Alpha	2	N
12*	Order Received Zip Code	5 character zip code	Numeric	5	N
13*	Order Received Zip Plus	4 character zip extension	Numeric	4	N
14	Ship to Address	Street name, number, or PO Box	Alpha/Numeric	40	Y
15	Ship to Suite	Suite, Apt, Lot	Alpha/Numeric	40	N
16	Ship to City	Name of city	Alpha	40	Y
17	Ship to State	2 character state abbreviation	Alpha	2	Y
18	Ship to Zip Code	5 character zip code	Numeric	5	Y
19	Ship to Zip Plus	4 character zip extension	Numeric	4	N
20	Reference Number	Reference Number	Numeric	19	N
21	Amount of Sale	Total amount of sale	Numeric	15 including 2 decimals	Y

*** Fields 8 through 13 are only to be used by states having origin sourcing for in-state sales.**

During processing, the Reference Number and Customer Entity Code shall be used as follows:

- Reference Number & 'T' = Taxable unless Reference Number is coded as exempt on the state's Tax Matrix
- Reference Number & 'E' = Exempt (Customer provided exemption certificate, does not matter if Reference Number is taxed or exempt)
- No Reference Number & 'T' = Taxable (If Reference Number is not listed, default for the product is taxable)

- No Reference Number & 'E' = Exempt (Customer provided exemption certificate, does not matter if Reference Number is taxed or exempt)

An explanation of each field and what can be tested with that field is as follows. A single entry may test for more than one issue, for example you may test sourcing, rates, and taxability in one entry.

1. Date - Date of the transaction
 - a. Blank dates will be populated with current date by CSP or CAS provider if the test deck is not the Quarterly Test Deck. If the date is blank in the Quarterly test deck sent by Testing Central the CSP will populate the date with the first day of the testing quarter.
 - b. Dates may be used to:
 - i. Test for rate changes - by entering a date prior to rate change and one after the rate change.
 - ii. Test for tax rates on returned items purchased prior to a rate change - Use a negative amount for the return amount and a date prior to the rate change (to represent the purchase date).
2. Record Number
 - a. Missing or nonnumeric record numbers will generate errors.
3. Seller SSTID (See section I)
 - a. Seller SSTIDs are provided for each state to use in the Test Deck. States may use some or all of the Seller SSTIDs for that state.
4. Seller Location ID
5. Seller State
 - a. State seller is located in may be different from state where order is received.
 - b. In-State Seller – determined by seller state versus ship to state.
 - c. Out-of-State Seller – determined by seller state versus ship to state.
6. Delivery Method - No longer used
7. Customer Entity Code
 - a. Identifies taxable or exempt customers.
 - i. T - Taxable customer
 - ii. E - Exempt Customer
 - iii. Include both T and E codes in the test deck
 - iv. Does not check validity of exemption - completed exemption certificate, exempt entity, prescription provided, etc.
8. to 13. Order Received Address
 - a. Tests sourcing for origin states

- i. Include vendors receiving orders in state with deliveries in and out of state
 - ii. Include vendors receiving orders out of state with deliveries in and out of state
- b. States with destination sourcing do not use fields 8 to 13

14. to 19. Ship to Address

- a. Tests sourcing for destination states
- b. Tests sourcing for out-of-state deliveries for origin states
 - i. Include delivery addresses in and out of state.
 - ii. Include vendors with addresses in and out of state.

Address information in fields 8-19 is used to test sourcing -- determines which jurisdictions receive tax on the transaction. States may choose to include transactions from all jurisdictions or a sampling of jurisdictions. Transactions should be included from jurisdictions that impose tax and those that do not impose tax.

States that have complex boundary identification issues should include addresses that encompass multiple jurisdictions or cross city, county, and zipcode boundaries. All levels of address must be represented, street, zip4 and 5 digit zip.

Jurisdiction testing should return the FIPS code for each jurisdiction for that address. The FIPS code is used to determine the tax rates. The tax table has rates listed by FIPS code.

Watch for:

- Sourcing - is it based on order received address or ship to address (origin or destination sourcing)
- Use of address level information (must be exact match to boundary table information)
- Use of zip 4 information (if address level does not match)
- Use of zip information (if no address or zip4 match) - this will return the lowest tax rate for that zip code.

If the test deck addresses are not run through a CASS (Coding Accuracy Support System) and the addresses are not in proper format or zip4 is missing, they will probably not match to the correct jurisdictions.

If USPS does not deliver to an address, that address will not have a Zip4. Most CASS systems will not correct the format of an address not in the USPS system. However, other delivery companies may make delivery to the address.

Testing for address without Zip4 will only match if address is exactly as in the boundary table.

Testing should be done for PO Boxes as products can be shipped to a PO Box. A PO Box should have a Zip4, a match should be made at that level.

20. Reference Number

- a. Tests taxability of products and administrative definitions in SSUTA using Reference Numbers from Tax Matrix (SSTGB Form F0014) as revised May of each year. Testing using reference numbers from the current year's tax matrix will begin with the fourth quarter testing. Results should correspond with the state's Tax Matrix.
- b. Include all Reference Numbers in the test deck to validate proper tax application.

21. Amount of Sale

- a. Use a variety of sales amounts.
 - i. Large and small dollar amounts, including cents
 - ii. Positive and negative amounts
- b. Test for:
 - i. Tax calculation
 - ii. Rounding rules

F. Test Deck Output.

Test Deck Output Transmission

- Test Decks submitted online: Upon completion of processing, the candidate, CSP, or CAS provider shall notify the state that the Test Deck Output files are available for retrieval on their online site. The testing state will download the data and compare the actual results with the expected results.
- Test Decks submitted Quarterly by TC: The CSP or CAS provider will send the Test Deck Output files to TC no later than 15 days prior to the beginning of the tested quarter. TC will send the file to the states to review. Any changes sent to the CSP or CAS after the 1st of the month will be individually tested with that state.

The resulting Test Deck Output files will consist of two files:

1. Results - Transaction records with jurisdiction and rate results
2. Errors – Transaction records with errors

File Names: Resulting Test Deck Output files will follow this naming convention:

014TD20100101R.csv
014TD20100101E.csv

First three digits will be the last three digits of the CSP or CAS SSTID, 'TD' indicates test deck, date (YYYYMMDD) test was completed. The last character is 'R' for results or 'E' for errors.

File Format: The Test Deck Output files will be in a comma delimited text format (.csv) with no header row. Do not embed any commas in any field.

Results File

Each row of the Results file shall contain the original uploaded data plus fields appended with the results.

Results file is now required to include your systems validated/scrubbed address. Within the results file, in numbers 86 through 91, provide the validated/scrubbed address results that were used with the state boundary files to determine the accurate taxing jurisdiction (FIPS code).

The Results file fields, format, record length, and required order are listed below.

Number	Field Name	Description	Format	Length
1	Date	Transaction date	YYYYMMDD	8
2	Record Number	Identifying number	Numeric	8
3	Seller SST ID	Seller SST ID	Alpha/Numeric	9
4	Seller Location ID	Seller Location ID	Alpha/Numeric	9
5	Seller State	State where seller is located	Alpha	2
6	Delivery Method	Is delivery in seller vehicle?	Y/N	1
7	Customer Entity Code	Is customer taxable?	T/E	1
8*	Order Received Address	Street name, number, or PO Box	Alpha/Numeric	40
9*	Order Received Suite	Suite, Apt, Lot	Alpha/Numeric	40
10*	Order Received City	Name of city	Alpha	40
11*	Order Received State	2 character state abbreviation	Alpha	2
12*	Order Received Zip Code	5 character zip code	Numeric	5
13*	Order Received Zip Plus	4 character zip extension	Numeric	4
14	Ship to Address	Street name, number, or PO Box	Alpha/Numeric	40
15	Ship to Suite	Suite, Apt, Lot	Alpha/Numeric	40
16	Ship to City	Name of city	Alpha	40
17	Ship to State	2 character state abbreviation	Alpha	2
18	Ship to Zip Code	5 character zip code	Numeric	5
19	Ship to Zip Plus	4 character zip extension	Numeric	4
20	Reference Number	Reference Number	Numeric	5
21	Total Sales Amount	Total amount of sale	Numeric	15 including 2 decimals
22	ResultType	0=good address used 2=address unknown, fallback to zip	Numeric	1
23	Taxability Code	Taxable/Non-taxable flag for item	Y/N	1
24	FIPS Jurisdiction Code 1	First FIPS Jurisdiction Code	Numeric	5
25	FIPS Tax Rate 1	First FIPS Tax Rate	Numeric	6 including 5 decimals
26	FIPS Tax Amount 1	Numeric value representing tax for first FIPS	Numeric	15 including 2 decimals

27	FIPS Jurisdiction Code 2	Second FIPS Jurisdiction Code	Numeric	5
28	FIPS Tax Rate 2	Second FIPS Tax Rate	Numeric	6 including 5 decimals
29	FIPS Tax Amount 2	Numeric value representing tax for second FIPS	Numeric	15 including 2 decimals
30	FIPS Jurisdiction Code 3	Third FIPS Jurisdiction Code	Numeric	5
31	FIPS Tax Rate 3	Third FIPS Tax Rate	Numeric	6 including 5 decimals
32	FIPS Tax Amount 3	Numeric value representing tax for third FIPS	Numeric	15 including 2 decimals
33	FIPS Jurisdiction Code 4	Fourth FIPS Jurisdiction Code	Numeric	5
34	FIPS Tax Rate 4	Fourth FIPS Tax Rate	Numeric	6 including 5 decimals
35	FIPS Tax Amount 4	Numeric value representing tax for fourth FIPS	Numeric	15 including 2 decimals
36	FIPS Jurisdiction Code 5	Fifth FIPS Jurisdiction Code	Numeric	5
37	FIPS Tax Rate 5	Fifth FIPS Tax Rate	Numeric	6 including 5 decimals
38	FIPS Tax Amount 5	Numeric value representing tax for fifth FIPS	Numeric	15 including 2 decimals
39	FIPS Jurisdiction Code 6	Sixth FIPS Jurisdiction Code	Numeric	5
40	FIPS Tax Rate 6	Sixth FIPS Tax Rate	Numeric	6 including 5 decimals
41	FIPS Tax Amount 6	Numeric value representing tax for sixth FIPS	Numeric	15 including 2 decimals
42	FIPS Jurisdiction Code 7	Seventh FIPS Jurisdiction Code	Numeric	5
43	FIPS Tax Rate 7	Seventh FIPS Tax Rate	Numeric	6 including 5 decimals
44	FIPS Tax Amount 7	Numeric value representing tax for seventh FIPS	Numeric	15 including 2 decimals
45	FIPS Jurisdiction Code 8	Eighth FIPS Jurisdiction Code	Numeric	5
46	FIPS Tax Rate 8	Eighth FIPS Tax Rate	Numeric	6 including 5 decimals
47	FIPS Tax Amount 8	Numeric value representing tax for eighth FIPS	Numeric	15 including 2 decimals
48	FIPS Jurisdiction Code 9	Ninth FIPS Jurisdiction Code	Numeric	5
49	FIPS Tax Rate 9	Ninth FIPS Tax Rate	Numeric	6 including 5 decimals
50	FIPS Tax Amount 9	Numeric value representing tax for ninth FIPS	Numeric	15 including 2 decimals
51	FIPS Jurisdiction Code 10	Tenth FIPS Jurisdiction Code	Numeric	5
52	FIPS Tax Rate 10	Tenth FIPS Tax Rate	Numeric	6 including 5 decimals
53	FIPS Tax Amount 10	Numeric value representing tax for tenth FIPS	Numeric	15 including 2 decimals
54	FIPS Jurisdiction Code 11	Eleventh FIPS Jurisdiction Code	Numeric	5
55	FIPS Tax Rate 11	Eleventh FIPS Tax Rate	Numeric	6 including 5 decimals
56	FIPS Tax Amount 11	Numeric value representing tax for eleventh FIPS	Numeric	15 including 2 decimals
57	FIPS Jurisdiction Code 12	Twelfth FIPS Jurisdiction Code	Numeric	5

58	FIPS Tax Rate 12	Twelfth FIPS Tax Rate	Numeric	6 including 5 decimals
59	FIPS Tax Amount 12	Numeric value representing tax for twelfth FIPS	Numeric	15 including 2 decimals
60	FIPS Jurisdiction Code 13	Thirteenth FIPS Jurisdiction Code	Numeric	5
61	FIPS Tax Rate 13	Thirteenth FIPS Tax Rate	Numeric	6 including 5 decimals
62	FIPS Tax Amount 13	Numeric value representing tax for thirteenth FIPS	Numeric	15 including 2 decimals
63	FIPS Jurisdiction Code 14	Fourteenth FIPS Jurisdiction Code	Numeric	5
64	FIPS Tax Rate 14	Fourteenth FIPS Tax Rate	Numeric	6 including 5 decimals
65	FIPS Tax Amount 14	Numeric value representing tax for fourteenth FIPS	Numeric	15 including 2 decimals
66	FIPS Jurisdiction Code 15	Fifteenth FIPS Jurisdiction Code	Numeric	5
67	FIPS Tax Rate 15	Fifteenth FIPS Tax Rate	Numeric	6 including 5 decimals
68	FIPS Tax Amount 15	Numeric value representing tax for fifteenth FIPS	Numeric	15 including 2 decimals
69	FIPS Jurisdiction Code 16	Sixteenth FIPS Jurisdiction Code	Numeric	5
70	FIPS Tax Rate 16	Sixteenth FIPS Tax Rate	Numeric	6 including 5 decimals
71	FIPS Tax Amount 16	Numeric value representing tax for sixteenth FIPS	Numeric	15 including 2 decimals
72	FIPS Jurisdiction Code 17	Seventeenth FIPS Jurisdiction Code	Numeric	5
73	FIPS Tax Rate 17	Seventeenth FIPS Tax Rate	Numeric	6 including 5 decimals
74	FIPS Tax Amount 17	Numeric value representing tax for seventeenth FIPS	Numeric	15 including 2 decimals
75	FIPS Jurisdiction Code 18	Eighteenth FIPS Jurisdiction Code	Numeric	5
76	FIPS Tax Rate 18	Eighteenth FIPS Tax Rate	Numeric	6 including 5 decimals
77	FIPS Tax Amount 18	Numeric value representing tax for eighteenth FIPS	Numeric	15 including 2 decimals
78	FIPS Jurisdiction Code 19	Nineteenth FIPS Jurisdiction Code	Numeric	5
79	FIPS Tax Rate 19	Nineteenth FIPS Tax Rate	Numeric	6 including 5 decimals
80	FIPS Tax Amount 19	Numeric value representing tax for nineteenth FIPS	Numeric	15 including 2 decimals
81	FIPS Jurisdiction Code 20	Twentieth FIPS Jurisdiction Code	Numeric	5
82	FIPS Tax Rate 20	Twentieth FIPS Tax Rate	Numeric	6 including 5 decimals
83	FIPS Tax Amount 20	Numeric value representing tax for twentieth FIPS	Numeric	15 including 2 decimals
84	Total Sales Amount	Numeric value representing total sales amount	Numeric	15 including 2 decimals
85	Total Tax Amount	Sum of FIPS tax amounts 1 - 20	Numeric	15 including

				2 decimals
86	Address for Rate	Street name, number, or PO Box	Alpha/Numeric	40
87	Suite for Rate	Suite, Apt, Lot	Alpha/Numeric	40
88	City for Rate	Name of City	Alpha	40
89	State for Rate	2 character state abbreviation	Alpha	2
90	Zip Code for Rate	5 Digit zip code	Numeric	5
91	Zip Plus for Rate	4 Digit Zip Plus	Numeric	4

Error File

A record or file will error for such reasons as an incorrect number of record fields in the file, fields (including blanks/nulls) that are not separated by commas and errors specific to the contents of the field. Questionable transactions should be included in the error file for further review.

The Error File fields, format, record length, and required order are listed below.

Field Name	Description	Format	Length
Date	Transaction Date	YYYYMMDD	10
Record Number	Identifying number	Numeric	8
Seller SST ID	Seller SST ID	Alpha/Numeric	9
Seller Location ID	Seller Location ID	Alpha/Numeric	9
Seller State	State where seller is located	Alpha	2
Delivery Method	Is delivery in seller vehicle?	Y/N	1
Customer Entity Code	Is customer taxable?	T/E	1
Order Received Address	Street name, number, or PO Box	Alpha/Numeric	40
Order Received Suite	Suite, Apt, Lot	Alpha/Numeric	40
Order Received City	Name of city	Alpha	40
Order Received State	2 character state abbreviation	Alpha	2
Order Received Zip Code	5 character zip code	Numeric	5
Order Received Zip Plus	4 character zip extension	Numeric	4
Ship to Address	Street name, number, or PO Box	Alpha/Numeric	40
Ship to Suite	Suite, Apt, Lot	Alpha/Numeric	40
Ship to City	Name of city	Alpha	40
Ship to State	2 character state abbreviation	Alpha	2
Ship to Zip Code	5 character zip code	Numeric	5
Ship to Zip Plus	4 character zip extension	Numeric	4
Reference Number	Reference Number	Numeric	5
Total Sales Amount	Total amount of sale	Numeric	15 including 2 decimals
Error Code	Type of error	Numeric	2
Error Comments	Explanation of error	Alpha/Numeric	100

Error Codes and explanation of Code for use in the Error File.

Error Code	Error Field	Message

01	Date	Transaction date invalid format
02	Seller SST ID	Seller SST ID invalid or missing
03	Seller State	State invalid
04	Ship to Address	Address unavailable or incorrect format
05	N/A	N/A
06	Ship to City	City unavailable or incorrect format
07	Ship to State	State unavailable or incorrect format or zip does not match
08	Ship to Zip Code	Zip code unavailable or incorrect format
09	Ship to Zip Plus	Zip plus incorrect format
10	Reference Number	Reference Number invalid
11	Amount of Sale	Amount of sale incorrect format or missing
12	Entire Record	Improper record
13	Customer Entity Code	Code missing
14	Record Number	Record number missing
15	Order Received Address	Address unavailable or incorrect format
16	Order Received to City	City in incorrect format
17	Order Received to State	State in incorrect format or zip does not match
18	Order Received to Zip Code	Zip code in incorrect format
19	Order Received to Zip Plus	Zip plus incorrect format

G. End-to-End Testing. After states verify accuracy of tax calculations, end-to-end testing should be performed. End-to-end testing allows the state to review the process from entry of the transaction through the transmission of the SER, including the financial transaction in test mode transmission to the state using the standard protocol approved by the Governing Board.

End-to-end testing may be done by using the same test decks used to verify accuracy of tax calculations or a state may choose to use a smaller test deck(s) to verify accuracy of SER for multiple or complex jurisdictions. The test deck should be checked for accurate results prior to testing the SER. The test deck is sent to the CSP or CAS candidate by using the CSP or CAS online system or by email as determined at that time.

The CSP or CAS candidate should process the test deck and complete the SER including applicable financial transaction information. The completed SER should be sent to the state in test mode as if it were an actual return being filed. The CSP or CAS candidate will need to contact each state to obtain information on where the SER test results are filed and any password or ID information the state may require. Each transaction shall have a unique system identification number. The data submitted and the data returned shall be saved as the transaction details. The state will verify if the SER is processed properly and the fields contain the correct data.

Testing is to confirm the process is accurate and conforms to the SST Guidelines. The official XML schemas can be found on the TIGERS website at <http://www.statemef.com>, under Projects, SST-Streamlined Sales Tax. The Implementation Guide on the SSTP website technology page provides details as to what is included in the schema.

H. SST IDs for testing.

Each state is provided with 50 SST IDs to use in the testing process. These SST IDs are readily identifiable so they will not be comingled with production transactions.

State/Possession	Abbreviation	Beginning Number	Ending Number
ALABAMA	AL	S00001001	S00001050
ALASKA	AK	S00002001	S00002050
ARIZONA	AZ	S00003001	S00003050
ARKANSAS	AR	S00004001	S00004050
CALIFORNIA	CA	S00005001	S00005050
COLORADO	CO	S00006001	S00006050
CONNECTICUT	CT	S00007001	S00007050
DELAWARE	DE	S00008001	S00008050
DISTRICT OF COLUMBIA	DC	S00009001	S00009050
FLORIDA	FL	S00010001	S00010050
GEORGIA	GA	S00011001	S00011050
GUAM	GU	S00012001	S00012050
HAWAII	HI	S00013001	S00013050
IDAHO	ID	S00014001	S00014050
ILLINOIS	IL	S00015001	S00015050
INDIANA	IN	S00016001	S00016050
IOWA	IA	S00017001	S00017050
KANSAS	KS	S00018001	S00018050
KENTUCKY	KY	S00019001	S00019050
LOUISIANA	LA	S00020001	S00020050
MAINE	ME	S00021001	S00021050
MARYLAND	MD	S00022001	S00022050
MASSACHUSETTS	MA	S00023001	S00023050
MICHIGAN	MI	S00024001	S00024050
MINNESOTA	MN	S00025001	S00025050
MISSISSIPPI	MS	S00026001	S00026050
MISSOURI	MO	S00027001	S00027050
MONTANA	MT	S00028001	S00028050
NEBRASKA	NE	S00029001	S00029050
NEVADA	NV	S00030001	S00030050
NEW HAMPSHIRE	NH	S00031001	S00031050
NEW JERSEY	NJ	S00032001	S00032050
NEW MEXICO	NM	S00033001	S00033050
NEW YORK	NY	S00034001	S00034050
NORTH CAROLINA	NC	S00035001	S00035050
NORTH DAKOTA	ND	S00036001	S00036050
OHIO	OH	S00037001	S00037050
OKLAHOMA	OK	S00038001	S00038050
OREGON	OR	S00039001	S00039050
<u>Not Used</u>		S00040001	S00040050
PENNSYLVANIA	PA	S00041001	S00041050

RHODE ISLAND	RI	S00042001	S00042050
SOUTH CAROLINA	SC	S00043001	S00043050
SOUTH DAKOTA	SD	S00044001	S00044050
TENNESSEE	TN	S00045001	S00045050
TEXAS	TX	S00046001	S00046050
UTAH	UT	S00047001	S00047050
VERMONT	VT	S00048001	S00048050
VIRGINIA	VA	S00049001	S00049050
WASHINGTON	WA	S00050001	S00050050
WEST VIRGINIA	WV	S00051001	S00051050
WISCONSIN	WI	S00052001	S00052050
WYOMING	WY	S00053001	S00053050
PUERTO RICO	PR	S00054001	S00054050

I. Responsibilities of Testing Central, States, CSP and CAS providers.

Testing Central Responsibilities

1. TC will report to the Executive Director of SST and will provide the following:
 - a. Communication regarding changes to CSP and CAS systems and acceptance testing by member states.
 - b. Historical data concerning system changes, testing dates, and dates changes were migrated into production for auditors and state administrators.
 - c. Communication between the CSP, CAS providers, TIGERS, and member states to ensure system and format changes are implemented in a timely manner.
 - d. Monitoring of any necessary system changes and testing of systems.
2. Maintain contact lists of providers and member states.
3. Review rates and boundaries databases for new states.
4. Monitor and assist communication between states and providers.
5. Maintain up to date information on the certification and testing status of CSP and CAS candidates.
6. Provide system for tracking submitted, completed, and approved change requests (Forms TC0001 and TC0005).
7. Notify potential providers of member state change requests submitted on Form TC0001 and testing results.
8. Notify states of CSP and CAS provider changes submitted on Form TC0005. These changes may need regression testing.
9. Monitor testing time period for member states.
10. Notify appropriate parties of system change status (approved TC0005 or TC0001) (i.e., ready for testing, failed testing, production moves).
11. Provide reports upon request of outstanding and completed system changes.

12. Maintain system to capture complete change data. This will include backups of system.
13. Ensure current testing documents are available for new states and vendors.

State Responsibilities:

1. Test all functions provided by the candidate used in calculating and preparing returns and the processing of returns prior to certification. This includes tax rules, boundary and rates, and SER completion and processing.
2. Prepare, maintain, and submit test deck(s) for self-evaluation by candidates, testing candidates for certification, quarterly testing for updates to boundaries, rates, and product taxability, and for change requests submitted by a state, CSP or CAS provider.
3. Use the online system to test candidate functionality and accuracy through the submission, retrieval and analysis of that state's test deck transactions.
4. Review test deck output results and notify TC of errors or requested changes using Form TC0001.
5. Submit all requested changes to a CSP system or CAS to TC using form TC0001. This includes errors found during testing, changes to the state's tax matrix (SSTGB Form F0014), state tax rates, and taxability of other products.
6. Submit all changes in tax application or rules to all CSPs and CAS providers when the change is made using Form TC0001. This includes changes made by law, regulations, administrative rules, policy or rulings. The CSP or CAS provider will review and make necessary changes to their tax rules, then send those changes to the state for approval.
7. Test changes in CSP systems or CAS made pursuant to a TC0001 or TC0005 after the CSP or CAS provider has notified the state the changes have been made and prior to the date of implementation if possible. Complete form TC0001 or TC0005 when the state has approved the changes and return form to TC.
8. The state should be able to clear the testing environment and do a total system reset for the state when appropriate. If the state uploads or downloads test results to a database, this will prevent duplication of records and mixing of prior results with current results.
9. Have resources readily available to resolve, correct, retest, and restore corrected application components into the test environment during testing.
10. Communicate all actions that will change the status of a change request (i.e. testing failure, pass/fail of change, production date etc.).
11. Maintain and provide to TC a current list of names and contact information of individuals authorized to submit change requests, approve test results and receive communications from TC on status changes.

CSP, CAS provider, and CSP or CAS Candidate Responsibilities:

1. Maintain an online system for submitting, processing and providing output files for test deck results and for single transaction testing (section D).

2. Submit all changes to the CSP system or CAS including tax rule changes and changes to systems in the calculation and processing of the return to TC using Form TC0005.
3. The CSP or CAS provider will send a complete list of tax rules to states to review within thirty (30) days of the end of a contract term with the SSTGB. This rules list will include the CSP/CAS SKU Number, a detailed product description, the CSPs determination as either Taxable or Exempt and the date the rule was added. A citation supporting the taxability determination should also be provided for any tax rules not previously certified.
4. Accept only state requested system changes submitted through TC on the approved form TC0001.
5. Make updates to exemptions, jurisdictions, rates, and tax rules submitted by states through TC on Form TC0001 and updates to tax rules for Reference Numbers submitted by TC.
6. Communicate with TC any actions that will change the status of a change request (e.g., testing failure, pass/fail of change, production date, etc.).
7. Complete changes submitted on TC0001 within the agreed upon number of days prior to the implementation date of the changes.
8. Complete and return TC0001 to TC when state requested changes are completed.
9. Have provider resources readily available during testing to facilitate understanding and testing of the application and to resolve, correct, retest, and restore corrected application components into the test environment.
10. Produce the reports required by the Governing Board.
11. Maintain and provide to TC a current list of individuals authorized to submit change requests, report on status changes, and provide assistance for testing questions.