



**WIC EBT Retail Certification
Procedures and Test Scripts
Version 3
Draft February 2013**

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DOCUMENT INFORMATION

Version	Date Effective	Details
1.0		Initial document draft
1.1	4/9/2012	Updated based on comments from BAH and FNS
2.0	9/24/2012	Updated based on comments received, reviewed and agreed upon by WIC stakeholders
3.0	2/1/2013	Updated based on comments from FNS regional offices.

1 INTRODUCTION

WIC EBT adds a new functionality to accepting payment for groceries at a retailer. While a retail grocer is required to become an Authorized WIC Vendor, as defined by the USDA FNS and the WIC State Agencies, they must also have their retail point of service (POS) system certified to initiate WIC EBT transactions. After reviewing this document, Authorized WIC Vendors shall be able to determine the requirements to certify their POS systems for WIC EBT processing.

Retail Certification is a means for the WIC Vendor to demonstrate that their system can:

- a) get prescription information (from the Smart Card or online EBT processor)
- b) complete the customer experience (PIN entry, sale, receipt printing)
- c) submit and process settlement for retailer payment (via Claim file or online capture)
- d) accept and utilize the Authorized Product List and Hot Card List files (as applicable)

Failure to operate a WIC EBT certified POS system will result in the WIC Vendor being prohibited from accepting WIC EBT cards, cancellation of a retailer's Authorized WIC Vendor contract or both.

Two primary goals of this document are:

- a) Define and describe the administration of a common Retail Certification process for all WIC EBT Retail Certifications.
- b) Develop and document standardized Retail Certification test scripts for use by both WIC Online and Smart Card EBT implementations.

Section 3 and 4 of this document provide a list of acronyms, abbreviations and definitions that the reader should review prior to reading the document. Section 5 provides a brief description of the two technology solutions for WIC EBT – Online EBT and Smart Card EBT. Section 6 identifies components of a WIC EBT Enabled POS system including the different types of systems that are certified. Section 7 identifies the entities involved in certification and describes the certification types. Section 8 contains the test scripts used in retail certification.

This document has been developed and reviewed through the collaboration of the ninety WIC State Agencies with input from their WIC EBT processors, Retail System Providers, Software Developers and consultants. The National Council of Weights and Measures (NCWM) National Type Evaluation Program (NTEP) certification process and the retail certification processes followed by the WIC State Agencies implemented at the time (Texas, Wyoming, New Mexico, Kentucky, Nevada and Michigan) were the basis for these procedures. The process has been approved by the USDA FNS WIC staff. Administration of the process is the responsibility of the WIC State Agencies.

As the WIC EBT POS environment is subject to changes due to commercial and industry enhancements, suggestions for changes to this document to address the enhancements are welcome. Change requests will be reviewed by FNS and the WIC State Agencies and approved requests incorporated into future updates of the document.

2 REFERENCES

The following documents should be referenced by readers of this document and can be obtained from the American National Standards Institute (www.ansi.org).

ANS X9.93:2008 Financial transaction messages – Electronic benefits transfer (EBT) – Part 1: Messages.

ANS X9.93:2008 Financial transaction messages – Electronic benefits transfer (EBT) – Part 2: Files.

The following documents shall be referenced by readers of this document and can be obtained from the USDA Food and Nutrition web site, www.usda.fns.gov.

Operating Rules – Women, Infants and Children (WIC) – Electronic benefits transfer (EBT) as amended and updated.

WIC EBT Technical Implementation Guide as amended and updated.

3 ACRONYMS AND ABBREVIATIONS

The following acronyms and abbreviations are used in this document.

Abbreviation / Acronym	Definition
APL	Authorized Products List
BIN	Bank Identification Number
CAD	Card Acceptor Device
CER	Certification Entity Representative
EBT	Electronic Benefit Transfer
HCL	Hot Card List
IIN	Institution Identification Number
PIN	Personal Identification Number
PLU	Price Look Up
POS	Point of Service
TPR	Test Problem Report
UPC	Universal Product Code
WIC	Special Supplemental Nutrition Program for Women, Infants, and Children

4 DEFINITIONS

The following definitions apply in this document. The definitions shown are capitalized when used in this document to aid clarity.

Term	Definition
Card Issuer	WIC State Agency (or its agent) which issues the WIC EBT Card to the WIC cardholder. The WIC State Agency is the Card Issuer of record.
Certification Entity	The organization established, operated and managed by the WIC State Agencies (in cooperation with FNS) that is responsible for conducting the WIC Retail Certification process.
Certification Entity Representative	The individual or individuals designated by the Certification Entity to perform retail certifications.
EBT Card Issuer Processor	An entity that is contracted by the responsible WIC State Agency for the implementation, maintenance and operation of all or part of the WIC State Agency's WIC EBT system and acts as the agent of the WIC State Agency to process and settle transactions. Also known as EBT Processor.
Price Look Up code (PLU)	Code assigned by the International Federation of Produce Standards (IFPS) to bulk produce food items.
Reconciliation	The process of comparing two sets of information to identify and resolve differences, e.g., benefit redeemed compared to benefits issued or transactions processed to the transactions settled.
Retail System Provider	An entity that provides and/or modifies or adds on to WIC Enabled POS systems' hardware, software and/or services to a WIC Vendor. Also referred to as reseller, value added reseller (VAR) or Independent Sales Organization (ISO).
Settlement	The transfer of funds to complete one or more prior transactions made, subject to final accounting, e.g., an ACH payment to a WIC Vendor for approved transactions.
Smart Card	A payment card that has a computer chip embedded on the card.
Software Developer	An entity that creates and maintains the basic software used to operate a POS system. The software may be modified or customized by the WIC Vendor or the Retail System Provider or both.
Third Party Processor	An entity that provides transaction processing services such as authorization transaction routing, claims processing and settlement for the WIC Vendor or the EBT Card Issuer Processor.
Universal Product Code (UPC)	A numeric code assigned by individual parties to identify a product as defined in ISO/IEC 15420 for bar codes.
Integrated POS system	The equipment and related software that is used by the WIC Vendor to process transactions including the PIN pad, POS terminal (including the card reader), cash register and back office processing software.
Stand-beside POS system	The equipment and related software that is used by the WIC Vendor to process WIC transactions only and is not integrated with the cash register.

Term	Definition
WIC State Agency	A governmental organization that participates in the federal WIC program. It manages the WIC program for a particular state, tribal organization, possession or territory. There are 90 WIC State Agencies, comprised of the 50 U.S. states, 34 Indian Tribal Organizations, the District of Columbia, and five territories (Commonwealth of the Northern Marianas Islands, American Samoa, Guam, Puerto Rico, and the U.S. Virgin Islands).
WIC Vendor	The merchant location that provides authorized WIC food items under an Authorized WIC Vendor Agreement with one or more WIC State Agencies.

5 WIC EBT OVERVIEW

The following sections provide a brief overview of the WIC EBT technology options.

5.1 WIC ONLINE EBT

WIC Online EBT processing uses a payment card that has a magnetic stripe to perform a series of real-time transactions between the card acceptor device (CAD) at the WIC Vendor and the EBT Card Issuer Processor to authorize the WIC EBT transaction. The WIC Cardholder's benefit balance is obtained from the EBT Card Issuer Processor using the card number and a valid PIN. The card number links to an account that contains the Prescription benefit balance. The WIC Cardholder presents food items for purchase and these food items are compared with the APL at the WIC Vendor for the appropriate Card Issuer. Authorized food items are then compared to the Prescription benefit balance to determine the available benefits. Food items approved in an EBT purchase transaction are subtracted from the Prescription benefit balance and the amount of the sale and the list of foods being purchased are submitted for payment.

To reconcile and settle completed transactions, approved purchases are totaled by the EBT Card Issuer Processor at the end of each processing day, and a WIC Auto-reconciliation file and an ACH payment file are created. The WIC Auto-reconciliation file is sent to the WIC Vendor or their agent. Based on the ACH payment file, funds are deposited to the designated financial institution that holds the settlement account for the WIC Vendor.

WIC Auto-reconciliation files and ACH payment files are often integrated with existing commercial reconciliation and ACH processing infrastructure and not conducted as a standalone activity.

In a WIC Online EBT system, the WIC Participant's prescription benefit data and the WIC Vendor settlement data are accessed from the WIC EBT system.

5.2 WIC SMART CARD EBT

WIC Smart Card EBT processing accesses the chip on an integrated circuit card to interact with the CAD at the WIC Vendor to approve purchases. Each WIC EBT purchase is authorized at the WIC Vendor and requires no real-time connection to the WIC EBT system.

To reconcile and settle completed transactions, approved purchases are totaled by the WIC Vendor or their agent at the end of each Processing Day and a WIC Claim File is created and submitted to the WIC State Agency for payment.

The WIC State Agency or their EBT Claims Processor will validate the WIC Claim File, create the WIC Auto-reconciliation file and will request an ACH payment file for valid transactions be generated by the financial entity responsible for payment. The ACH payment file is submitted to the WIC State Agency's settlement bank. Funds are deposited to the WIC Vendor's account at their settlement bank. The WIC State Agency or their EBT Claims Processor returns a WIC Auto-reconciliation file to the WIC Vendor that enables the WIC Vendor to reconcile transactions.

In a WIC Smart Card EBT system, the WIC Participant prescription benefit data is on the integrated circuit chip on the WIC Participant's WIC EBT card while the WIC Vendor and settlement data is accessed either in-house at the WIC State Agency or remotely at their EBT Claims Processor.

6 COMPONENTS OF A WIC EBT ENABLED POS SYSTEM

A WIC EBT Enabled POS system has many parts or components. These components are combined into different configurations to create the WIC Vendor's POS system. WIC EBT transactions are processed by these POS systems along various processing paths. The components, configuration and processing paths may be owned by the WIC Vendor or provided by other parties. The WIC Vendor's POS system and processing paths are required to be certified for WIC EBT processing. Appendix B identifies when changes in these components may require certification and the kind of certification to be performed.

6.1 HARDWARE

There are multiple hardware components to a POS system that processes WIC EBT. A hardware component that has an impact on the WIC EBT transaction is validated during the retail certification process.

The Card Acceptor Device (CAD) is a term used to describe the piece of equipment that reads the information from the card. The PIN Pad is a part of the CAD where the PIN and card are entered and where displays and instructions to WIC participant appear. The cash register is operated by the cashier. The scanner reads the UPC/PLU codes from the food items and the scale allows weighing food items. The change return provides coins from any change due and the printer prints receipts. The cash register is often connected to a backroom server that supports its operation. All of these components are part of the POS system.

Any change in hardware is to be reported to the Certification Entity(s) so that the change can be reviewed and a determination made if re-certification will be needed.

6.2 SOFTWARE

Each hardware component of the WIC EBT Enabled POS system may have software, computer instructions or applications written to direct the hardware how to perform. Software is often identified by a release or version number.

During initial certification the software affecting WIC EBT will be tested. Changes made to WIC EBT Enabled POS software after being initially certified need to be reported to the Central Certification Entity and reviewed for possible re-certification. These include but are not limited to:

- a) Vendor specific software changes to previously certified WIC Enabled POS systems software (customizing)
- b) Software changes to add on software to a previously certified WIC Enabled POS system (incrementing)
- c) Software changes to back end system interface(s) (modifying)
- d) Software changes to correct problems identified in operational WIC Enabled POS systems (maintaining).

6.3 WIC EBT ENABLED POS SYSTEM CONFIGURATIONS

Hardware and software components are combined to create a WIC EBT Enabled POS system configuration. Software Developers, Retail System Providers and WIC Vendors describe a POS system configuration by listing

these components, e.g., “IBM Model XYZ (cash register hardware) Version 123.4 (software release) Verifone POS terminal with integrated PIN pad (hardware) release 1.9 (software version).”

A WIC EBT Enabled POS system configuration may be certified with the Certification Entity by the Software Developer and/or Retail System Provider for use by WIC Vendors or the WIC Vendor may certify their own customized system. A list of the certified systems is maintained by the Certification Entity and made available to WIC Vendors when deciding how to implement WIC EBT.

6.3.1 ATTENDED WIC EBT ENABLED POS SYSTEMS

Attended WIC EBT Enabled POS systems are the most widely encountered configurations. A cashier operates the cash register, scanner and scale to enter the WIC Participant’s purchases. The WIC Participant uses a connected CAD and PIN Pad to read their EBT card and enter their PIN. The attended WIC EBT Enabled POS system is “integrated”, i.e., all the components operate in conjunction to complete the WIC EBT transaction and process any non-WIC purchases.

6.3.2 SELF-CHECKOUT WIC EBT ENABLED POS SYSTEMS

Self-checkout WIC EBT Enabled POS systems allow the WIC Participant to scan their purchases themselves. The focus of a self-checkout evaluation is to ensure that the WIC Participant’s experience is consistent with that at an attended WIC EBT Enabled POS system. The components of a self-checkout WIC EBT Enabled POS system are integrated.

6.3.3 STAND-BESIDE WIC EBT ENABLED POS SYSTEMS

Because of the time it may take to implement WIC EBT at a retailer in an Integrated POS system or because the WIC Vendor chooses to not integrate WIC EBT in their POS system, WIC State Agencies or their EBT processors may offer Stand-beside POS terminals to their WIC Vendors. These are attended POS terminals that only process WIC EBT transactions and operate separately from the existing POS system. They can be deployed quickly to meet the need of having the WIC Vendor operational in a short period of time. There may be a cost to the WIC Vendor for these POS terminals. Stand-beside WIC EBT Enabled POS systems do not support mixed basked and split tender functionality and consequently some related portions of the certification test scripts are not performed.

6.3.4 MOBILE WIC EBT ENABLED POS SYSTEMS

Retail certification of mobile devices utilizes the same test scripts with the exception of some cases that would not apply to these “all-in-one” devices. The customer interface may require some additional test cases, receipt presentation may differ and the registration and configuration of the device is tested. An example of this type of Stand-beside terminal is those used in Farmers’ Markets. Note that an abbreviated APL file may be used in Farmers’ Markets. The test scripts identify those cases which do not apply and any additional cases required.

6.4 WIC EBT PROCESSING PATHS

In addition to the configuration of the POS system, WIC EBT transactions and data are exchanged along processing paths that may be operated by the WIC Vendor or by other parties.

6.4.1 TELECOMMUNICATION LINES

The POS system is connected to telecommunication lines to exchange transaction data in WIC EBT Online systems and to receive and store the files exchanged in WIC EBT processing for both WIC EBT Online and Smart Card processing. These telecommunication lines may be configured as dedicated lines, dial-up, or even wireless processing paths. Telecommunication lines are provided by various communication providers. The WIC Vendor is responsible for insuring adequate telecommunication service for WIC EBT processing.

WIC Smart Card EBT testing includes verification of the telecommunications as part of certification, verifying that the POS can perform the FTP (file transfer protocol) successfully. They also verify that the process is automated, i.e., is initiated by the system and that re-tries are done until connected successfully. Security encryption keys reside in the terminal and the files transmitted are secured using a variety of security methods. The Test Buy Certification (Level 3) verifies the telecommunication path at each store.

For WIC Online EBT, telecommunication paths are tested when initially connecting to a new entity, such as a Third Party Processor or directly to a WIC Vendor. Encryption keys are exchanged and maintained by the connected parties.

6.4.2 BACK-END SYSTEMS

The WIC Vendor's POS system is connected to back-end systems that may or may not be local to the WIC Vendor's location and which may or may not be owned and operated by the WIC Vendor. Back-end systems provide various services to the WIC Vendor such as transaction routing, inventory management, payment tracking, reporting, etc.

Back-end systems may be provided by Retail System Providers, Third Party Processors or EBT Card Issuer Processors. These systems are tested for both Online and Smart Card WIC EBT with the WIC State Agencies as part of the WIC Vendor certification process.

The WIC Vendor is responsible for configuring and insuring the performance of the back-end systems utilized in their POS environment.

7 RETAIL CERTIFICATION PROCESS OVERVIEW

WIC Retail Certification verifies the WIC Vendor processing of WIC transactions. When a POS system is developed or modified to support WIC EBT processing it needs to be certified that it works as required by the WIC State Agencies and FNS to be considered a WIC Enabled POS System.

7.1 RETAIL CERTIFICATION ENTITIES

The entities participating in a retail certification, as defined in Section 4 are:

- a) WIC State Agency
- b) Certification Entity
- c) EBT Card Issuer Processor or EBT Processor
- d) Third Party Processor (if required)
- e) Software Developer
- f) Retail System Provider
- g) WIC Vendor

FNS or its designated contractor may also participate in certifications.

7.2 TYPES OF CERTIFICATION

There are several different types of certification that are described in the following sections. Pre-certification testing is the first step that must be completed. It is followed by either a Commercial Certification or a Retailer Specific Certification. Once either the Commercial or Retailer Specific Certification has been successfully completed, then a Test Buy Certification may be conducted as required. Table 1 summarizes the certification types.

Table 1 – Certification types

Certification Type
Pre-Certification
Commercial Certification – Level 1
Retailer Specific Certification – Level 2
Test Buy Certification – Level 3
Compliance Buy
Re-certification

7.2.1 PRE-CERTIFICATION

Pre-certification is done by a WIC Vendor or the Software Developer or the Retail System Provider by executing the Retail Certification test scripts shown in Section 8.

WIC Vendors conduct pre-certification testing to help ensure that the system is ready for certification and to identify any changes needed. The test environment used for pre-certification should be the same as the environment that will be used for certification testing. The pre-certification should be coordinated with the WIC State Agency and/or its EBT processor. It uses EBT cards provided by the WIC State Agency or the EBT Card Issuer Processor.

For WIC Smart Card EBT systems, the pre-certification includes the exchange of daily EBT files (Claim, APL, HCL and Auto-reconciliation files), receipts, transcripts and other evidence of the test results.

For WIC Online EBT systems, the pre-certification uses existing established test communication networks to run test transactions and provide evidence of completion.

A Centralized Certification Representative is assigned responsibility for coordinating pre-certification and may need to go on-site in advance of the full test to ensure a smooth certification.

7.2.2 COMMERCIAL CERTIFICATION – LEVEL 1

Commercial certification refers to a retail certification of a system that is available “off the shelf” for WIC Vendors. This includes Integrated POS systems, such as those developed by IBM or NCR as well as Stand-beside POS terminals that have been certified as part of the implementation of the WIC State Agency and are provided to retailers by the WIC State Agencies. These certifications were formerly scheduled and attended by representatives of one or more WIC State Agencies and FNS and/or their contractor (BAH). The complete test scripts are executed, which may include legacy WIC State Agencies’ specific test cases. Any files exchanged between the WIC State Agency or the EBT Card Issuer Processor and the WIC Vendor are also tested. For Smart Card certifications the files include the Claim, Auto-reconciliation, HCL and APL files. For Online certifications, the APL is tested and the logged records are reviewed for reconciliation certification.

The commercial certification test should be conducted in a stable and secure test environment. The WIC Vendors and Third Party Processors (if applicable) need to ensure that no disruptions occur during testing (i.e., no server restarts, no system maintenance, and a database free of any data from previous testing). The WIC Vendor WIC EBT application software should be frozen (no changes of any kind) during any certification test. The WIC Vendor should be using the latest APL and HCL files provided for the test. Updated software to correct deficiencies identified during testing should only be permitted once the scripted tests have been completed unless otherwise agreed to by the Certification Entity and the WIC Vendor.

7.2.3 RETAILER SPECIFIC CERTIFICATION – LEVEL 2

Retailer specific certification testing refers to a retail certification of a system that is proprietary to the retailer. It may be a modification of a commercial system or developed entirely in-house. As with Commercial System Certifications, they are formally scheduled and attended by representatives of WIC State Agencies and FNS. The complete test scripts are executed.

7.2.4 TEST BUY CERTIFICATION – LEVEL 3

Test Buy Certification testing refers to testing being done by the retailer and/or a WIC State Agency representative and involves a live purchase at the WIC Vendor location to demonstrate the system is properly configured. The POS system being used is tested by executing a subset of the certification test script and providing receipts showing the results (See Appendix C for an example of the Test Buy Script).

Test Buy Certifications may be the only certification test done when only minor modifications have been made to a previously certified version or when approved by the WIC State Agency.

If the card to the POS terminal/ECR has already been tested and implemented for another WIC State Agency and the POS system configuration is the same, only a Test Buy certification should be needed.

7.2.5 COMPLIANCE BUY

Compliance Buys are not true parts of a retail certification but instead are done by representatives of the WIC State Agency (who may or may not include notifying the WIC Vendor) to determine conformance to WIC processing rules and regulations.

7.3 RE-CERTIFICATION

Reasons for re-certification include the release of new software or corrections of existing software as described in the following sections.

Re-certifications are conducted by the Certification Entity Representative as Commercial or Retailer-Specific certifications in the same manner as the original certification.

7.3.1 RE-CERTIFICATION OF MODIFIED SYSTEMS

When a previously certified WIC Enabled POS system is modified, whether it is the hardware or software, the WIC Vendor, Software Developer and/or the Retail System Provider is required to submit notification to the Certification Entity for review. The Certification Entity will review the changes and decide if and what type of re-certification is required.

The criteria for re-certification include but are not limited to:

- a) A change that affects the WIC Participant's interface with the POS.
- b) A change that affects the information and/or appearance of a receipt.
- c) A change that potentially impacts the reconciliation and settlement of transactions.

7.3.2 RE-CERTIFICATION OF NON-COMPLIANT SYSTEMS

If a previously certified WIC Enabled POS system performs inconsistently during normal business operations, the Certification Entity may declare the system out of compliance and either instruct the WIC Vendor to stop use of the system until it is re-certified or let it continue but in a restricted manner depending on the severity of the problem.

7.4 TEST PROCESS

The purpose of certification testing is to verify that the system meets the requirements of the WIC State Agency and FNS. Certification testing is intended to validate that the system will accurately process WIC EBT purchases in the WIC Vendor's locations. Certification testing also verifies that the necessary processes and procedures are in place before the system is approved. As part of the testing, the WIC Vendor needs to verify they have the ability to receive and process APL and, for WIC Smart Card EBT, HCL files. In addition, evidence of reconciliation (the ability of the WIC Vendor to match transactions submitted to payments received) is required. For Online EBT, the auto-reconciliation file or comparable files demonstrate evidence of reconciliation. For Smart Card EBT, the claim file, auto-reconciliation file and acknowledgment file are provided. Note that the process described in the following section applies primarily to Commercial or Retailer Specific Certifications and that Test Buy Certifications are more limited in scope.

7.4.1 TEST PREPARATIONS

The Certification Entity Representative, working in partnership with the WIC Vendor, the Software Developer or the Retail System Provider, is responsible for coordinating the planning, preparation, and execution of a certification test. Certification testing is recommended to occur no less than 6 months before the system is expected to be implemented in a specific WIC Vendor location and allows for time for retest if necessary. The Certification Entity Representative maintains the schedule of planned and proposed certifications. WIC State Agencies may also provide staff resources to support a certification test.

7.4.2 TEST ENVIRONMENTS

The test environment needs to be established in order to conduct certification testing. The Certification Entity Representative works with the WIC Vendor, the Software Developer or the Retail System Provider to ensure its test environment is ready well in advance of the certification test. Using the standard, common test scripts, the CER works with the WIC State Agency or their EBT Card Issuer Processor to establish WIC Participant cards or card records with sufficient WIC benefits issued (either on the WIC Online EBT host or on the WIC Smart Cards) to complete all of the test scripts. For an on-line system, the CER works with the WIC EBT Card Issuer Processor to establish the test environment, the WIC Vendor to ensure its test environment is established, and ensures the necessary telecommunications links are setup and tested with all participants (WIC State Agency, Third Party Processor and EBT processor) well in advance of the certification test. For an off-line system, the WIC State Agency is responsible for ensuring their internal test environment.

For both WIC Online and Smart Card EBT, the WIC Vendor shall have an Integrated POS system or Stand-beside POS terminal configured as planned for production. The devices shall include the PIN pad, card reader/writer, cashier entry device (cash register), product scanner and a means to enter weighted food items.

The CER will ensure that the party to be tested has received and processed the appropriate APL (UPC/PLU files) and HCL file (for WIC Smart Card EBT) before the certification test begins. The APL and HCL files provided contain the data necessary to support the test cases described in the test scripts.

In some cases, certifications may involve more than one hardware configuration (for example, if there are multiple Card Acceptor Devices or CADs). Test scripts and testing hours will need to be adjusted to accommodate the extra workload if more than one hardware configuration is to be evaluated during a certification test.

7.4.3 TEST LOCATION

While the location of retail certification testing has been dependent on the type of certification being conducted, in the future all types of certification could be conducted either remotely or in person.

For Pre-certifications, the testing is typically done remotely between the Certification Entity and the WIC Vendor, System Developer or Retail System Provider, as agreed to by all parties.

For Commercial and Retailer-Specific certification testing the certification may be done at the WIC Vendor, the Software Developer or the Retail System Provider's designated site and attended at a minimum, by the CER. Other attendees are determined by the CER and the space available. The certification is typically conducted Tuesday through Thursday with travel by the required attendees on Monday and Friday. The CER may arrive early and conduct pre-testing on the Monday before a certification test to ensure the system is ready for certification. Remote certifications are encouraged whenever possible to minimize certification expense. The Commercial and Retailer-Specific certification tests do not occur until the results of the pre-certification testing have been approved by the Certification Entity.

7.4.4 TEST TIMEFRAMES

Development of WIC EBT functionality for an entirely new POS system begins with the WIC Vendor or Retail Service Provider having discussions with the Certification Entity and can take several months. A WIC Vendor or Retail Service Provider may take from six months to two years to develop WIC EBT capabilities for an entirely new POS system before being ready for certification testing.

Certification testing is scheduled with the Certification Entity up to two months in advance for completion during regular work hours and days (8:00 a.m. to 5:00 p.m., Monday through Friday).

The Certification Entity is available for contact on normal business days, Monday through Friday. The location and contact information for the Certification Entity is:

[to be completed]

Name

Address, City, St Zip

Phone/Email

7.4.5 TEST CARDS

Test cards and test data are basically the same for all WIC State Agencies using WIC Online EBT systems except for specific data values e.g., the BIN and encryption keys.

[To be completed. The group discussed but did not reach consensus on whether a WSA could accept the successful certification of the PIN encryption (online) and/or signature generation (Smart Card) done by another WSA]

[To be completed. Explain how test cards or obtained and how the information on them or related to them is updated]

7.4.6 TEST EXECUTION

Certification is done by following the test scripts defined in Section 8. Detailed instructions for executing the test scripts are included.

7.4.7 WHAT IF SCENARIOS

During certification testing, there should be no deviations from the test scripts. Additional test scenarios may be created during testing; however, they should be documented and conducted after the formal test scripts have been completed. These additional scenarios are referred to as “what-if” tests. The key elements of a “what-if” scenario include the test case description, the expected result, and the actual result. “What-if” scenarios should be minimized. They may be developed by any of the test participants in response to observations from the certification test which suggest possible system errors that could occur. “What-if” scenarios are provided to the CER for execution and possible addition to the certification test scripts.

7.4.8 TEST PROBLEM REPORTS

Certification testing requires the creation of a problem log to record issues identified during testing. Test Problem Reports (TPRs) are recorded during Commercial System and Retailer Specific Certifications. TPRs are not formally reported for Pre-Certifications. Test Buy Certifications are either a “pass” or “fail” result for the entire test.

TPRs use a scale of 5 (critical system failure) to 1 (minor) to rate test problems or situations where unexpected results are received. The following are the detailed descriptions of the 5 TPR severity ratings:

- Severity 5 = Major malfunction of the system. Testing cannot continue until problem is resolved. Certification is not provided.
- Severity 4 = Major malfunction of component. Testing cannot continue until problem is resolved. Certification is not provided.
- Severity 3 = Function within component is not working correctly. Testing can continue with other functions within the component. Conditional Certification may be provided depending on the number of issues, the nature of the issues and the timing of the corrective action to resolve the issues.
- Severity 2 = Component has a minor editing error (e.g., misspelling on report or display). Error does not affect the function or validity of the test, but will need to be corrected before production. Conditional certification may be provided.
- Severity 1 = Issue is a design clarification or implementation issue that the State or the processor will correct. Certification is provided.
- Severity 0 = Observations made during the certification to improve the system. These do not affect the outcome of the certification.

Systems cannot be deployed with open TPRs of severity levels 4 and 5. A conditional approval may be given that allows systems with open issues of severity levels 2 and 3 to be deployed, see 7.4.9.2.

During testing, problems must be documented to support problem understanding, research, and resolution. At the end of each test day, the CER will meet with the WIC Vendor, the System Developer or the Retail System Provider to discuss the TPRs identified and to agree on a severity rating assignment for each issue. The rating is assigned to assist in determining the severity and priority of problems. If a problem has been identified, but it cannot be reproduced, it should be noted as an observation in the problem log. However, this type of problem can

be closed if research was conducted and the problem could not be recreated. The research activities and observations that pertain to this type of problem are documented in the certification test report prepared by the CER.

Immediately after the formal, scripted tests have been completed, WIC Vendors are usually given the opportunity to implement any software updates to address the test problems. If time permits, the CER may perform regression testing of the corrected test problems to verify that system operates as expected. The Test Problem Reports are discussed with the WIC Vendor, Software Developer or Retail System Provider representatives and updated to reflect the most current status of the identified test problems. The Test Problem Reports are available for review by WIC State Agencies and all other parties involved in the certification process. TPRs that are identified during certification testing are to be resolved prior to deployment of the POS system.

7.4.9 TEST RECOMMENDATIONS

At the conclusion of a Commercial or Retailer Specific certification test, the CER will review the results and recommend to the FNS Regional office with a copy to FNS Headquarters whether or not to approve the system. FNS will review the recommendation and make the final decision on certification and declare the system “EBT ready”.

Although discussions regarding the system occur throughout testing, this discussion focuses on making an approval decision that is provided to the WIC Vendor, System Developer or Retail System Provider. The decision on whether or not to approve a system is based on the total number of outstanding problems and the severity rating of those problems. The WIC State Agencies receive notification that certification testing was conducted and the results of the test.

Certifications can be a) Not approved, b) conditionally approved or c) unconditionally approved.

7.4.9.1 NOT APPROVED CERTIFICATIONS

When a certification test is not approved, depending on the severity of the problems encountered and the extent of any software code changes needed, the system may need to do a complete re-certification. A report of the issues identified is provided with an indication of what will need to be re-tested and in what timeframe. If re-testing is not completed in the timeframe recommended, the entire certification will need to be repeated.

Generally, some level of *regression* testing is completed. Regression testing is any type of software testing that seeks to uncover new software bugs, or *regressions*, in existing functional and non-functional areas of a system after changes, such as enhancements, patches or configuration changes, have been made to them. The intent of regression testing is to ensure that a change, such as a bug fix, did not introduce new faults. One of the main reasons for regression testing is to determine whether a change in one part of the software affects other parts of the software.

The timeframe for correcting issues depends on the WIC Vendor’s WIC EBT rollout plan.

7.4.9.2 CONDITIONALLY APPROVED CERTIFICATIONS

Circumstances which may permit a conditional certification may include, but are not limited to, a determination that the risks associated with the open issues are minimal or that the necessity of installing the new system

outweighs any risk posed by the open issues. Some conditional certifications may also require evidence that the open issues are resolved prior to the installation of the corrected version. The form of evidence will be determined by the WIC State Agency and FNS.

When conditionally approved, a plan for resolution is required and the certification remains incomplete. Online EBT systems may be conditionally approved until the results of settlement processing can be verified.

7.4.9.3 UNCONDITIONALLY APPROVED CERTIFICATIONS

When approved, the certification is provided to the WIC State Agencies. The WIC State Agencies notify the WIC Vendor if the WIC Vendor is authorized in their jurisdiction or the Retail System Developer seeking certification. Lists of the Commercial and Retailer-Specific versions that have been certified are available from the Certification Entity, each WIC State Agency and FNS.

7.4.9.4 TEST RESULT DATA

With every certification, the results of the test are to be made available for review by all other WIC State Agencies.

8 WIC EBT RETAIL CERTIFICATION TEST SCRIPTS

The test scripts for the different POS system configurations described in Section 6.3 are essentially the same. Test scripts are created and maintained by the Certification Entity. The test scripts for both WIC EBT Online and Smart Card processing are attached to this document. [To be completed, attach standardized test scripts].

8.1 TEST SCRIPT FUNCTIONAL AREAS

The functional areas below are examined during WIC Vendor certification testing for both WIC EBT Online and Smart Card certifications.

- a) Balance inquiries - a WIC Participant may perform a balance inquiry only at a POS system and/or it may be performed as part of the redemption process.
- b) Redemptions - these are the actual purchases using WIC EBT benefits, including exception processing (reversals, store and forward, etc.). The focus of testing is to ensure the WIC Vendor's POS system allows a participant to access their benefits to make WIC purchases.
- c) Operator functions - Operator logon, logoff, manager override functions, receipt printing, end of day total calculations, training mode, and system configuration and setup are part of the testing when it is determined to impact WIC EBT processing.
- d) File exchanges - Testing the file exchange process verifies that the WIC Vendors are able to access, read, and properly apply data provided by the WIC State Agency or its EBT processor. For WIC EBT Smart Card systems, this also includes creating and submitting claim files and receiving the Auto-reconciliation, Authorized Product List (APL) and Hot Card List (HCL) files.

The WIC State Agency or its EBT processor is responsible for creating and maintaining the Approved Product List (APL) and Hot Card List (HCL) files. Depending on the POS system, these files may be automatically downloaded to the WIC Vendor or the WIC Vendor's Third Party Processor may need to download them.

- e) Settlement and Reconciliation - Reconciliation involves comparing the daily transaction receipts to the settlement request that was initiated by the WIC Vendor. This verifies that the system records each transaction and the correct, total amount of WIC sales activity is requested for reimbursement. The CER is responsible for verifying that the WIC EBT settlement system properly processed and reimbursed the WIC Vendor for each approved transaction. For WIC EBT Smart Card processing the receipts, claim files and auto reconciliation files are compared to match transactions performed against what was processed during certification. In WIC EBT Online processing, receipts and vendor transaction data are compared to the WIC EBT processor settlement data.

8.2 POST TEST SETTLEMENT AND RECONCILIATION

A WIC Vendor may prove the functionality of their POS system during certification testing. A final step to be completed prior to implementation is verifying that the WIC Vendor has the ability to transmit and receive the files necessary to complete payment. These are the claim file (Smart Card EBT only) and the auto-reconciliation file.

The WIC Vendor is required to establish communication interfaces for this purpose, including any security measures required. Evidence of completed test transactions are verified for each desired WIC State Agency for review and approval.

9 WIC STATE AGENCY CONTACTS

WIC Vendors are required to have an Authorized WIC Vendor agreement with the WIC State Agency where they do business. WIC Vendors should contact the WIC State Agencies in the areas where they do business for questions about obtaining an agreement and to obtain a list of the certified WIC EBT Enabled POS systems, Software Developers and Retail System Providers.

A list of the current WIC State Agency contacts for WIC Vendors can be found on the USDA FNS website.

APPENDIX A WIC EBT RETAIL CERTIFICATION WORKFLOW DIAGRAM

[to be completed once agreement reached by workgroup]

Complete and submit application

Administrator reviews and determines if testing necessary

Device assigned control number and laboratory; email sent to applicant

Vendor contacts lab within 30 days to discuss test requirements, deposit requirements and schedule delivery of device or field site

Device is tested with 90 days of notification using standard script

Certificate of compliance issued and applicant notified

APPENDIX B WIC EBT RETAIL CERTIFICATION REQUIREMENTS MATRIX

The following matrices show which entities involved in WIC EBT retail certifications are required to certify with each other. The column on the left identifies the entity to be certified; the row across the top identifies the entity requiring the certification and the intersections identify what and when certification is done. Separate matrices are provided for WIC EBT Online and Smart Card processing. All certification events are shown, including those outside the scope of this document, such as the certification between the EBT Card Issuer Processor and the WIC State Agency or Third Party Processor.

Certification Matrix for WIC EBT Online							
	Entity Requiring the Certification						
Entity to be Certified	WIC State Agency	EBT Card Issuer Processor	Third Party Processor	Payment Engine	Retail System Provider	PIN pad Manufacturer	WIC Vendor
EBT Card Issuer Processor	X						
Third Party Processor		X					
Payment Engine			Only if WIC data or logic changes		Validates any updates		
Retail System Provider		Only if WIC data or logic changes	Only if WIC data or logic changes				Validates that the POS is certified for WIC EBT
PIN pad manufacturer				X	If Payment Engine not used		
WIC Vendor	Validates the POS is certified before issuing a Vendor #						

Certification Matrix for WIC EBT Smart Card								
	Entity Requiring the Certification							
Entity to be Certified	EBT Card Issuer Processor	WIC State Agency	WIC Vendor Host	Payment Engine	Retail System Provider	PIN pad mfg.	Smart Card mfg.	WIC Vendor
EBT Card Issuer Processor		X						
WIC Vendor host		Validates Consolidated Claim File						
Payment Engine		Only if WIC data or logic changes			Validates updates			
Retail System Provider		Certifies WIC logic and claim file structure changes	Validates Claim File					Validates that the POS is certified
PIN pad manufacturer				X	Only if Payment Engine not used			
Smart Card manufacturer		Validate New Models & Versions are certified with the PIN pad manufacturers		X	Only if Payment Engine not used	X		
WIC Vendor		Validates the POS is certified before issuing Vendor #						

APPENDIX C TEST BUY CERTIFICATION SAMPLE TEST SCRIPT

TEXAS DEPARTMENT OF STATE HEALTH SERVICES

WIC EBT RETAIL VENDOR IN-STORE ECR SYSTEM TESTING CERTIFICATION SCRIPT

System Test Date: _____

Retail Vendor Name: _____

Address: _____

City, State ZIP: _____

DSHS USE ONLY

EBT ID # _____ County _____

Account # _____ Outlet # _____

System Type: _____

Received STAF: Y N Successful Claim: Y N

Successful Claim Date: _____

Tester's Contact Information (Name & Phone #): _____

Retail Vendor Configuration Tested (list hardware and software for POS controller, lane, and payment terminal) MUST BE INCLUDED:

POS Controller Hardware:	POS Controller Software:
Lane Hardware:	Lane Software:
Payment Terminal Hardware:	Payment Terminal Software:

_____ Retail Vendor Authorized Signature <small>(signature certifies an understanding of the EBT certification process and verification that the configuration listed above is the configuration in the store that is being tested)</small>	Date	_____ Tester's Signature <small>(signature certifies that the in-store certification script was conducted in accordance with the steps identified herein)</small>	Date
_____		_____	
Retail Vendor Printed Name		Tester Printed Name	

CAUTION: Completion and submission of this document does not grant the Retail Vendor approval to begin accepting the WIC EBT card. The WIC EBT card must not be accepted until written notification is received from the State authorizing the Retail Vendor to accept the card. WIC EBT transactions submitted for payment prior to authorization by the State will NOT be paid.

All of the following conditions **MUST** be met for the Retail Vendor to be EBT Ready (approved to accept the WIC EBT card and submit EBT transactions for payment):

- Must have WIC EBT Lab Certified ECR Software installed in the store; and
- Must be a WIC approved Retail Vendor (contact WIC Vendor Management at 1-800-252-9629 to apply if not already approved); and
- Must successfully complete an In-Store ECR System Test (All completed pages of the certification script to include signatures, initials, and dates; receipts from card used during test and card used during test returned to DSHS; and successful submission of an In-Store ECR System Test claim file); and
- Must successfully complete EBT Policy & Procedure training (contact WIC Vendor Training at 1-800-252-9629); and
- Must complete and return a System Training Attestation Form to the State.

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IN-STORE CERTIFICATION STEPS

All of the certification scenarios below are performed in the store lane using a WIC EBT production In-Store ECR System Test card with the ECR system in Redemption Mode

Step #	Description of item to verify and /or task to perform	Expected Result	Date Performed	Initials of Tester	Comments (please note any discrepancies)
<p>Verify Production Level configuration settings and IP address.</p> <p>NOTE: The IT Department completes this step for corporate stores (i.e. Wal-Mart, HEB, etc.)</p>					
1	<p>Verify the store server has Production Level Account # (four numerical digits), Outlet # (four numerical digits), EBT ID (four alpha/numerical digits), Merchant /Card Acceptor ID (15 numerical digits), Forwarder ID (11 numerical digits), and current date/time values.</p> <p>Verify State Production IP Address of 160.42.127.41 for FTP of claim files.</p>	<p>A successful FTP connection to State Host should occur.</p>			
<p>Verify current APL and HCL files reside on the system in the lane.</p> <p>NOTE: The IT Department completes this step for corporate stores (i.e. Wal-Mart, HEB, etc.)</p>					
2	<p>Verify the current APL and HCL files are downloaded and pushed out to the lane prior to conducting the In-Store ECR System Test.</p>	<p>Current APL and HCL files should reside on the system in the lane.</p>			
<p>Valid WIC card; valid PIN entry.</p> <p>NOTE: In certain systems you have to scan an item before you can enter a PIN on the PIN pad. Card acceptor device must encrypt PIN and not display the actual numbers entered by the client.</p>					
3	<p>Insert a valid In-Store ECR System Test production card into card acceptor device (POS Terminal)</p>	<p>Card acceptor device should read the card and prompt client to enter PIN</p>			
4	<p>Enter a valid PIN</p>	<p>Card should be authenticated following valid PIN entry. A "Beginning WIC Benefit Balance" receipt should print.</p>			

Step #	Description of item to verify and /or task to perform	Expected Result	Date Performed	Initials of Tester	Comments (please note any discrepancies)
Perform WIC redemption transaction and approve purchase					
5	Scan the UPC for a bag of dried beans	Item should scan as WIC Ok.			
6	Scan a PLU or enter the PLU for a piece of produce (ex: apple, banana, etc)	Item should scan as WIC Ok.			
7	Subtotal WIC transaction item	A utilization receipt should print showing the quantity to be deducted from the card.			
8	Accept WIC sales transaction	Transaction successfully finalized.			
9	Print "Ending WIC Balance" receipt	The receipt should show the CVV dollar amount has been decremented correctly for the CVV item.			
Perform PIN lock transaction with seven (7) invalid PIN entries					
<p>NOTE: Some card acceptor devices are set to accept only three (3) invalid PIN entries at a time. If the card acceptor device displays a "Card Problem Return to Clinic" message after three (3) invalid PIN entries, remove the card, re-insert the card and attempt three (3) more invalid PIN entries. When the "Card Problem Return to Clinic" message displays again, remove the card, re-insert the card, and attempt one (1) more invalid PIN entry.</p> <p>NOTE: If you need to scan a product prior to entering a PIN, the cashier may need to void or zero tender the transaction after the card is locked.</p>					
10	Insert card in card acceptor device and attempt seven (7) invalid PIN entries.	After seven (7) invalid PIN attempts have been completed the card acceptor device should display "Card Problem Return to Clinic" and write a POSCC 12 in the claim detail record.			
Insert locked Production In-Store ECR System Test card in Card Reader Terminal					
11	Insert the locked In-Store ECR System Test card in the card acceptor device.	The card acceptor device should display "Card Problem Return to Clinic" and write a POSCC 01 in the claim detail record.			

Step #	Description of item to verify and /or task to perform	Expected Result	Date Performed	Initials of Tester	Comments (please note any discrepancies)
Batch Processing: FTP of files to /from State Host					
12	Most systems are designed to automatically process and submit the claim file to the State Host as part of their overnight store close process. If this is the case, we want to ensure the process works and is followed.	Claim file should contain: <ul style="list-style-type: none"> ➢ A purchase transaction for a bag of dried beans and for a piece of produce (ex: apple, banana, etc). ➢ A second transaction containing a POSCC code 12 should be placed in the claim file. A status change reason code 12 should be written in the file EFWICFPAccess on the card. ➢ A third transaction containing a POSCC code 1 should be placed in the claim file. 			
Complete System Training Attestation Form					
13	Complete and sign the "System Training Attestation Form".	The form should contain the signature and printed name of both the store representative who received the system training and will provide training to cashiers, and the ECR Vendor /DSHS representative who provided the training.			
Submission of documentation to DSHS					
14	Submit completed and signed documentation to: Department of State Health Services EBT Development Branch ATTN: Tami Altmiller Mail Code: 1933 4616 W. Howard Lane Suite 840 Austin, TX 78728	Items submitted to DSHS are: <ul style="list-style-type: none"> ➢ Completed Script (with date, initials, and signatures of both Retail Vendor and ECR Vendor /DSHS representatives. ➢ Card used during In-Store ECR System test. ➢ Receipts from card used during In-Store ECR System test. ➢ Completed and signed System Training Attestation form. 			

Completion and submission of this document does not grant the Retail Vendor approval to begin accepting the WIC EBT card. The WIC EBT Card must not be accepted until written notification is received from the State authorizing the Retail Vendor to accept the card. WIC EBT transactions submitted.