

# WIC

## UNIVERSAL INTERFACE



Version 1.4

October 20, 2009

## TABLE OF CONTENTS

<b>Table of Contents .....</b>	<b>2</b>
<b>1 Document Information .....</b>	<b>5</b>
1.1 <i>Document History.....</i>	<i>5</i>
<b>2 Introduction .....</b>	<b>6</b>
2.1 <i>Offline and online environments.....</i>	<i>6</i>
2.2 <i>Use of this document .....</i>	<i>7</i>
2.3 <i>System Functions' Database of Record and Interface Points.....</i>	<i>9</i>
2.4 <i>Implementation Considerations.....</i>	<i>10</i>
<b>3 Functional Descriptions .....</b>	<b>13</b>
3.1 <i>Section Organization.....</i>	<i>13</i>
3.1.1 <i>Parameter table Layout.....</i>	<i>13</i>
<b>4 Direct Screen Links.....</b>	<b>15</b>
4.1 <i>Security.....</i>	<i>15</i>
4.1.1 <i>Database of Record and Interface Point(s).....</i>	<i>15</i>
4.1.2 <i>System Logon.....</i>	<i>15</i>
4.1.3 <i>User Maintenance for SSO.....</i>	<i>16</i>
4.1.4 <i>Update User.....</i>	<i>17</i>
4.1.5 <i>Deactivate User .....</i>	<i>18</i>
4.1.6 <i>Access the EBT System .....</i>	<i>18</i>
<b>5 Message Based Access.....</b>	<b>20</b>
5.1 <i>Account Maintenance.....</i>	<i>20</i>
5.1.1 <i>Database of Record and Interface Point(s).....</i>	<i>21</i>
5.1.2 <i>Create EBA.....</i>	<i>21</i>
5.1.3 <i>Update EBA.....</i>	<i>22</i>
5.1.4 <i>View EBA Details.....</i>	<i>22</i>
5.1.5 <i>Get EBA Details.....</i>	<i>23</i>
5.1.6 <i>Get Household ID Using Card Number.....</i>	<i>24</i>
5.2 <i>Benefit Maintenance .....</i>	<i>25</i>
5.2.1 <i>Database of Record and Interface Point(s).....</i>	<i>25</i>
5.2.2 <i>Add / Adjust Benefits.....</i>	<i>25</i>
5.2.3 <i>Get Benefit Balance.....</i>	<i>27</i>
5.3 <i>Local Agency Maintenance.....</i>	<i>28</i>

5.3.1	Database of Record and Interface Point(s).....	28
5.3.2	Create Local Agency.....	28
5.3.3	Update Local Agency.....	29
5.3.4	Deactivate Local Agency .....	29
5.4	<i>Clinic Maintenance</i> .....	30
5.4.1	Create Clinic .....	30
5.4.2	Update Clinic .....	31
5.4.3	Deactivate Clinic .....	31
5.5	<i>Retailer Maintenance</i> .....	31
5.5.1	Database of Record and Interface Point(s).....	32
5.5.2	Create Retailer.....	32
5.5.3	Update Retailer .....	33
5.5.4	Deactivate Retailer.....	34
5.6	<i>Category/Subcategory Maintenance</i> .....	34
5.6.1	Database of Record and Interface Point(s).....	35
5.6.2	Get Category Information.....	35
5.6.3	Get Subcategory Information .....	35
5.7	<i>Cardholder/Card Maintenance</i> .....	36
5.7.1	Database of Record and Interface Point(s).....	36
5.7.2	Add Cardholder UI .....	36
5.7.3	Add Cardholder/Card .....	37
5.7.4	Submit PIN.....	38
5.7.5	Get Cardholders/Cards .....	39
5.7.6	Get Cardholders/Cards for Household.....	40
5.7.7	Deactivate Card .....	40
5.7.8	Replace Card .....	41
5.7.9	Unlock PIN .....	41
<b>6</b>	<b>Batch File Interfaces .....</b>	<b>43</b>
6.1	<i>General File Structure</i> .....	43
6.1.1	Data Required in all files .....	43
6.2	<i>DAily Interface Reconciliation Batch file</i> .....	44
6.2.1	Database of Record and Interface Point(s).....	44
6.2.2	Required Data.....	44
6.3	<i>Redemption Batch File</i> .....	45
6.3.1	Database of Record and Interface Point(s).....	45
6.4	<i>Vendor Batch File</i> .....	45
6.4.1	Database of Record and Interface Point(s).....	45
6.4.2	Required Data.....	45

6.5	<i>Cat / Subcat Batch files</i> .....	46
6.5.1	Database of Record and Interface Point(s).....	46
6.5.2	Required Data.....	46
6.6	<i>Maximum Allowable Price Batch File</i> .....	47
6.6.1	Database of Record and Interface Point(s).....	47
6.6.2	Required Data.....	47
6.7	<i>Benefit Month Reconciliation Batch file</i> .....	48
6.7.1	Database of Record and Interface Point(s).....	48
6.7.2	Required Data.....	49
<b>Appendix A - Composite Data Elements</b> .....		<b>50</b>
<b>Appendix B - Data Dictionary</b> .....		<b>51</b>
<b>Appendix C - Abbreviated Terms</b> .....		<b>55</b>

**DOCUMENT INFORMATION****DOCUMENT HISTORY**

<b>Version</b>	<b>Date Effective</b>	<b>Details</b>
0.08	2/3/2009	Initial revision for external review.
1.1	8/5/2009	Internal review of revisions resulting from comments to first round of comments
1.2	8/9/2009	2 <sup>nd</sup> Draft for external review
1.3	10/15/09	3 <sup>rd</sup> draft for general review and distribution
1.4	10/20/09	Updated with FNS comments – NWA release

## INTRODUCTION

The purpose of this document is to provide a functional specification for the interface between a WIC Management Information System (MIS) and a WIC EBT system (EBT). This document describes:

- The operations supported in the interface.
- The core data elements required by the various operations.
- The processing rules that need to be implemented to support the operation.

This document is not intended to serve as an Application Programmer Interface (API) reference. Rather, this document provides a high level description of operations required in the EBT-MIS API. This specification is intended to be independent of the underlying technical implementation. The details of those specific technical implementations are beyond the scope of this document and will be made available elsewhere.

Moreover, this document provides a description of the operations that are recommended for use by a WIC MIS. The recommended division of labor between the EBT and the MIS platforms is summarized in the subsequent sections of this document.

The following table summarizes those areas that are addressed in this document:

Functional Area	System
Account Maintenance	MIS
Benefit Maintenance	MIS
Clinic Maintenance	MIS
Retail / Peer Group Maintenance	MIS
Category/Subcategory Maintenance	NUPC
Maximum Price Maintenance	EBT
Cardholder/Card Maintenance	the EBT System
User Maintenance for SSO	MIS
Reconciliation	the EBT System

## OFFLINE AND ONLINE ENVIRONMENTS

This document is intended to provide a standard for functionality and information transfer that is equally applicable to either an offline or an online WIC EBT solution.

Conceptually, the information and functionality that a WIC Information System must provide is the same for either and, in both cases, the data has to be ported to a repository somewhere that supports the EBT functionality. The differences are often one of terminology. In a smart card system, the food benefit database is housed in a computer chip on the participant's EBT card and the retailer database and settlement functions are housed on a central server. In an online system, both the food account database and the retailer / settlement database are housed on a remote host processing computer.

Regardless though, for either approach, a certain amount of information must be ported to the EBT database in order to make EBT possible. Online solutions rely on external telecommunications links to move information to the central database while offline systems generally rely on a local USB or LAN connection to move information to the smart card reader / writer and on external telecommunications links to populate the retailer / settlement database.

This document has tried only to define the functions that must be supported by the MIS and EBT environments and the data that is required to enable those functions. The method of porting that data between the environments has purposefully been left to the application designer. The hope is that a builder of a new WIC information system will be able to incorporate all of the defined EBT functionality and data requirements within their design in such a way that it can be integrated equally well with either an offline or an online solution. Conceptually, such a design could incorporate a specific "EBT Interface" object or module that would be the receiver or sender of all EBT related messages. This would isolate any changes required in the WIC information system that may result from the decision to make use of an offline or an online solution and would greatly reduce the costs of any necessary modifications.

#### USE OF THIS DOCUMENT

It is recognized that an MIS and an EBT system must work in concert to provide the functionality required to deliver WIC food benefits electronically. In some cases, the responsibility for a given functional component is very clear. For example, the action of setting up a household EBT account requires that the MIS collect the necessary data and then initiate an interaction with the EBT system to establish the account record in the EBT database. The same process is true for benefit issuance.

However, for some functions, the division of labor is not entirely clear. An example would be an interface with the NUPC for downloading the list of Agency approved food products (UPCs). This information is used in the EBT system but is managed by the agency in conjunction with vendor peer groups and the Agency's category and sub

category table. (Note that it is strongly recommended that an Agency's category and subcategory table reflects the national model maintained by FNS.) Either side could implement this functionality and through defined interfaces, expose the functionality to the other side.

This document has been developed based on a suggested distribution of application function. The following describes the philosophy behind the choices made as to where needed EBT functionality can be implemented, either in the MIS or EBT system.

- Promote portability between EBT and MIS systems
- Minimize the amount of data exchange
- Minimize points of failure
- Minimize potential data synchronization issues
- Let each system deal with data that is "natural" to itself
- Let system with most data to support a feature implement the feature
- Maintain a seamless user experience

As an example of the application of this criteria, consider the functionality to interface with the NUPC. UPC data is used in the EBT system to build the APL needed in the retail store and to validate incoming WIC redemption transactions. UPC information is not required by the MIS except possibly for after-the-fact reporting, a requirement that can also be fulfilled by the EBT system. Consequently, maintaining the NUPC interface (and UPC data) in the EBT system meets the criteria as listed above for minimizing data exchange, minimizing points of failure, and minimizing potential data synchronization issues, among others.

Maximum allowable price maintenance provides another example. The source for the calculation of the maximum allowable price for food items is the WIC redemption data received from each retailer by the EBT system. Further, the EBT system, to accurately calculate the amount to be paid to a retailer for each redemption transaction, is also the user of the maximum allowable price data. Consequently, to be consistent with the principals cited above, it makes sense for the EBT system to provide the functionality to calculate and manage the maximum allowable price.

However, it must be recognized that an application designer has some discretion in the use of the interface points described in this document. For example, a builder of a new WIC MIS application may decide upfront to incorporate in the MIS certain functionality that may otherwise be included in an EBT platform. Consequently, this MIS would only implement the interface to the EBT system for only the set of functions that the MIS designer determines appropriate to the overall solution. On the other hand, when designing enhancements to a legacy WIC MIS to incorporate EBT, the designer may, for cost efficiency, choose to use functionality that already exists in the EBT system as

opposed to rebuilding it in the MIS. In this case, a more comprehensive set of interfaces would be implemented by the MIS.

The hope is that all EBT platforms will minimally make available the interface points (and functionality) described in this document. (Of course, for competitive reasons, an EBT system provider can certainly choose to implement functions in addition to what is described here but with the cautionary note that adding additional interfaces may cause portability issues.) It is expected that a WIC agency, when first implementing EBT or when replacing an EBT system, will choose an EBT solution based on a competitive analysis of interfaces (and functionality) offered by the various available solutions that best work within the capabilities of its MIS environment. The intent is to make the choice of the EBT platform free from interface constraints and a need for system modification.

Conversely, it is also expected that an EBT enabled WIC agency that is replacing its MIS will consider the EBT readiness capabilities of any candidate replacement MIS.

Minimally though, the expectation for MIS and EBT system solutions is that all interactions between the MIS and the EBT conform to the specifications for that particular interface as herein defined. Not all of the described interfaces have to be implemented, but if they do, they must conform to these specifications.

#### SYSTEM FUNCTIONS' DATABASE OF RECORD AND INTERFACE POINTS

As referenced above, one of the issues in the area of WIC EBT has been where does a certain functionality reside, in the MIS or the EBT system. Is the MIS or the EBT system the database of record for certain data? From which system does a user access the functionality or the data? The Universal Interface work group has taken great pains to define these requirements and answer these questions. The following table summarizes recommendations for both the database of record and the interface point for specific WIC EBT functionalities.

Note that there are functions included in this list that may not appear in this interface specification since this document is focused on the data movement between the EBT system and the MIS. If MIS does not maintain the data or need to access it, it is not part of the interface specification.

Functional Area			EBT DB of Record	MIS DB of Record	NUPC DB of Record	User Interface	Notes
EBT	Security	Role	X	X		Both	MIS Master of MIS User / EBT Master of EBT Users

Functional Area	EBT DB of Record	MIS DB of Record	NUPC DB of Record	User Interface	Notes
Account Maintenance		X		MIS	EBT system maintains account demographics, but account set-up, update, and deactivation is initiated from the MIS
Benefit Maintenance		X		MIS	
LA / Clinic Maintenance		X		MIS	Would be useful in EBT system to enhance query and reporting
Retailer Maintenance		X		MIS	Includes peer group maintenance
Category/Subcategory Maintenance			X	NUPC	
Cardholder/Card Maintenance	X			Either	
Reconciliation (MIS- EBT Auto- Reconciliation)		X		MIS	EBT will transmit a file of activity to the MIS for reconciliation with MIS daily activity
Redemption Batch File	X			MIS	The EBT system will make a daily activity file available to the MIS. A State Agency may choose not to use the file.
View EBT Balance / Transaction History	X			Either	
UPC Maintenance			X	NUPC	
NTE Calculations and Maintenance	X			EBT	
Retailer Bank Maintenance	X			EBT	
Financial Settlement and Reconciliation	X			EBT	
Card Inventory Management	X			EBT	Optional / enhanced functionality

### IMPLEMENTATION CONSIDERATIONS

WIC operations in a clinic setting are generally real time in nature. The regulation, to paraphrase, is for same day service which is usually interpreted as participants leaving the clinic with food benefits in hand. Consequently, many of the interactions between the WIC MIS and the WIC EBT environments, such as an account set up or a benefit

issuance, require a real time interface. An inherent objective for the universal interface is to make access to EBT functionality seamless to a user in the WIC clinic. Also inherent in describing this functionality is the understanding that the use of the functionality is driven by the MIS user. The EBT system is passive and only responds to requests from the MIS. This document describes two approaches (as follows) to implementing the universal interface. These may be used independently or in combination depending on the needs and preferences of the application designer.

1. Direct Screen links:

The assumption underlying this approach is that both the MIS and EBT system have a native WEB based user interface that allows a user to perform a range of EBT functions. The EBT system itself provides the user access and provides the screens needed to execute the functionality.

Interface functions described in this document provide tools that allow a clinic user that is logged on to the WIC MIS to readily gain access to the EBT system's native interface without ever having to leave the MIS environment to log on separately to the EBT environment. Their MIS user ID and password can be configured to provide access to the EBT user interface. This is referred to as a single sign on (SSO) approach. Once the security is properly constructed, the MIS, using the interface protocols described in this document, would be able to invoke the screen presentations native to the EBT system transparently to the clinic user.

2. Message based access:

The second approach is to have the MIS invoke EBT functionality by sending a message to the EBT system. (A common implementation of this approach might be the use of a WEB service call using SOAP). With this approach, the MIS will provide the user interface (e.g. paint the screens) that will either gather the data necessary to execute an EBT function or present the results of an EBT query to the clinic user.

This document also describes a batch interface for the transfer of bulk data between the MIS and EBT environments. This can be a two way data flow, with some of the batch transfers being initiated by the MIS and others by the EBT system.

Batch Interface	Initiator	Purpose
Redemption Data	EBT	Provide the MIS with a detail record of all benefit redemption activity.

Cat / sub cat and UPC	Either	Either the MIS or EBT systems may interact with the NUPC to get the Cat / subcat and UPC data. Both systems need portions of this data and a batch interaction may be necessary to pass the data between the two systems.
Maximum price data	MIS	If the MIS chooses to maintain the maximum allowable price for food items, it will have to pass this data (for each peer group) to the EBT system.
Vendor Data	MIS	The MIS is the master of vendor data and may want to pass portions of this data to the EBT system in a batch mode. Minimally, this interface would be used to keep the EBT system informed of approved WIC vendors and their peer groups.
Reconciliation	Either	Either the MIS or EBT system should pass to the other a batch file documenting the activity that was processed real time throughout the day. This allows the receiving system to validate and reconcile this data against its record of real time data transfers.

For an application designer, there are two important considerations to keep in mind when evaluating the use of the batch processes.

- Where should the underlying functionality reside. This has been discussed previously and the recommendation is to generally let each system deal with data that is natural to itself. As an example, it may be that the EBT system, which is the master for redemption data, provides some very powerful archive and reporting capabilities that are exposed to the agency user. Consequently, it might be redundant (and create additional work effort) for the MIS to also implement this existing functionality and therefore, use of the batch redemption file may not be necessary.
- Some of the above batch functions may also be implemented using real time functionality that is described elsewhere in this document.

## FUNCTIONAL DESCRIPTIONS

This section provides a detailed description of the recommended interfaces supported by the EBT System.

## SECTION ORGANIZATION

Each section is organized as follows:

1. Each section starts with a brief description of the functional area.
2. There is a section detailing the database of record for the functional area and which system should implement the user interface for the functional area.
3. There is a table listing the various operations implemented in the EBT System.
4. There are following subsections that describe each operation. If the WIC MIS is the master of the information, then the first operation that is documented is the operation (usually Create) that establishes the data object in the EBT System. In this way, a reader who is interested in a more high level view of the information presented in this document can focus on the information in the first subsection. Furthermore, each subsection describing a specific operation is organized as follows:
  - a. There is a brief description of the operation.
  - b. There is a table of input parameters for the operation. The table only covers the core elements needed for the specific operation. Additional general parameters that exist for the purpose of fulfilling logging requirements (such as username of user requesting operation or trace numbers) are documented below.
  - c. Any processing rules governing the action are listed. If the operation causes a screen to be displayed, then a description of the screen is given.

## PARAMETER TABLE LAYOUT

The input parameters for a request shall appear in a table with the following columns:

- Data element name – Name of parameter. Note that the parameter description appears in the Data Element Dictionary.
- CC – Condition Code – Indicates whether the parameter is required or may be NULL. The possible values are:
  - M – Indicates that a parameter is mandatory and may not be NULL.
  - O – Indicates that a parameter is optional and may be NULL. For update operations, if the field has an existing value and that value is to be

preserved, then the existing must be supplied as a parameter in the update operation. A value of null will cause the existing value to be overwritten with null.

- C – Indicates that a parameter may be required depending on the specific type of implementation being used.
- Notes – Any additional notes on parameter usage. Note that this column may be omitted if there are no additional notes on any parameters.

## DIRECT SCREEN LINKS

### SECURITY

In order for a system to have access to real-time services and screens in the EBT System, a system must be logged into the EBT System. Accessing screens in the EBT System carries some additional security requirements that are documented in the following SSO section. The additional security requirements are geared at appropriately restricting access of individual users based on group memberships once inside the EBT System. However, once access to an EBT System screen has been granted, only the EBT System security module may control the access level of the individual user. Note that within this construct, the MIS still has requirements to define the roles and capabilities of its users when providing direct access to the EBT environment.

### DATABASE OF RECORD AND INTERFACE POINT(S)

The following has been identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality:

<b>Database of Record</b>	<ul style="list-style-type: none"> <li>• MIS is master of MIS users</li> <li>• EBT is master of EBT users</li> </ul>
<b>Interface</b>	<ul style="list-style-type: none"> <li>• MIS user data and security functionality accessed via MIS</li> <li>• EBT user data and security functionality accessed via EBT</li> </ul>

### SYSTEM LOGON

The System Logon operation is used to grant access to an MIS to allow the MIS to invoke real-time operations in the EBT System. The following table lists the data elements in the request:

Data element name	Notes	CC
WIC Authority ID		M
System ID		M
Password	The password must be encrypted.	M

The following table lists the data elements in the response:

Data element name
Security Token

In order to invoke any subsequent real-time operation in the EBT System, the MIS must provide the WIC Authority ID and System ID used when invoking this System Logon operation along with the Security Token that is returned from this operation.

The following describes the processing rules associated with this operation:

Rule ID	Description
	The EBT System shall validate that System ID and WIC Authority are valid and that the given System ID has access for the WIC Authority ID.
	The EBT System shall decrypt the Password and validate that it is correct for the given System ID.
	The EBT System shall generate and return Security Token.
	The generated Security Token shall be valid for a configurable number of minutes (20 minutes is suggested timeout value).

Once the MIS has logged on to the EBT System, the MIS must periodically log on to the EBT System to retrieve a new token before the existing token expires. Note that the existing token remains valid for the entire number of minutes specified so that any “in flight” operations will succeed if a new token is requested in parallel with such operations. It is recommended that the MIS perform a System Logon on a recurring basis at an interval that is slightly less than the timeout out value for the security token.

---

#### USER MAINTENANCE FOR SSO

User maintenance for SSO comprises operations for maintaining SSO users in the EBT System. Users from a MIS that are setup in the EBT System shall be able to access screens in the EBT System via direct links from the MIS without having to go through an additional log on process in the EBT System. Note that users may be setup independently in the EBT System. However, such users will not have SSO functionality available.

The following table lists specific operations involved with this functional area:

Operation
Create User
Update User
Deactivate User
Access the EBT System

## CREATE USER

The Create User operation is used to create a SSO user in the EBT System. The following table lists the data elements in the request:

Data element name	CC
Username	M
Name of User	M
User Address	O
User Email Address	O

The following describes the processing rules associated with this operation:

Rule ID	Description
	The EBT System shall validate that Username does not already exist for the calling system.

---

## UPDATE USER

The Update User operation is used to update SSO user information in the EBT System. The following table lists the data elements in the request:

Data element name	CC
Username	M
Name of User	M
User Address	O
User Email Address	O

The following describes the processing rules associated with this operation:

Rule ID	Description
	The EBT System shall validate that Username does already exists for the calling system.

Note that entire record of user information is updated with the information provided in the request. For example, if the MIS desires to update the Name of User but not the User Email Address, then the original User Email Address must be provided. If the original User Email Address is submitted as NULL, then the User Email Address is saved as NULL.

### DEACTIVATE USER

The Update User operation is used to deactivate a SSO user in the EBT System. The EBT System will not accept subsequent the EBT System Access requests after a SSO user has been deactivated. The following table lists the data elements in the request:

Data element name	Notes	
Username		M

The following describes the processing rules associated with this operation:

Rule ID	Description
	The EBT System shall validate that Username does already exists for the calling system.
	The status of the user is changed to inactive. Note that the user record still exists in the EBT System.

### ACCESS THE EBT SYSTEM

The Access the EBT System operation is used to provide access to the EBT System screens from the MIS for a SSO user that is logged on to the MIS. The following table lists the data elements in the request:

Data element name	Notes	CC
System ID		M
WIC Authority ID		M
Security Token		M
Username		M
SSO Action	Currently, the only accepted value is logoff. If the parameter is null, then the EBT System will log on the user or will extend the user's session if it already exists.	O

Note that all parameters except System ID are encrypted. The details of encryption method are beyond the scope of this document.

The following describes the processing rules associated with this operation:

Rule ID	Description
	The EBT System shall validate that the Security Token is currently valid for the given System ID and WIC Authority ID.
	The EBT System shall validate that the Username is valid and in active status for the given System ID.

	If no session exists for the user and Action is not present, then a new session is created in the EBT System for the given user. Furthermore, the session will expire after an agency configured timeout (e.g. 20 minutes).
	If a session already exists for the user and Action is not present, then the expiration time for the session is extended for another 20 minutes.
	When the session is created, the EBT System security settings for user (based on the user's group memberships) are loaded.
	If Action is logoff, then the user's session is invalidated so that no further access to the EBT System is allowed (until the MIS initiates another logon for the user).

## MESSAGE BASED ACCESS

The following table lists common parameters required for most the EBT System web services. These parameters are unique to real time transactions. Batch files will have different requirements and some of the information will be present in the header record of the file.

Data element name	CC
System ID	M
Security Token	M
MIS Local Agency ID	O
MIS Clinic ID	C
Trace Number	M
Username	M
MIS System ID	M
Workstation ID	O
Date/Time	M
WIC Authority ID	M

Note that these parameters are not required for screen calls in the EBT System since the necessary parameter values are either:

- Derived from the user's session (Username, MIS System ID, WIC Authority)
- Initialized by the EBT System (System ID, Token, Date/Time)
- Not required when called from the EBT System screens (Trace Number)

## ACCOUNT MAINTENANCE

Account maintenance comprises operations for maintaining an electronic benefit account (EBA) in the EBT System. In particular, the EBA is linked to a household using the MIS Household ID. An EBA ties together all of the various data elements required to enable EBT functionality for a household. Such data elements include benefit information and transaction history. Subsequent operations on the EBA require the presence of the MIS Household ID which is used by the EBT System to identify the EBA to which the operation shall apply.

The following table lists account maintenance operations.

<b>Operation</b>
Create EBA
Update EBA
View EBA Details

#### DATABASE OF RECORD AND INTERFACE POINT(S)

The following has been identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality:

<b>Database of Record</b>	MIS
<b>Interface</b>	MIS
<b>Notes</b>	EBT system maintains account demographics, but account set-up, update, and deactivation is initiated from the MIS

#### CREATE EBA

The Create EBA operation is used to establish an EBA in the EBT System and link the EBA to a household from the MIS. The following table lists the data elements in the request:

<b>Data element name</b>	<b>CC</b>
Household Address (Mailing Address)	M
MIS Household ID	M
Head of Household (HOH) Name	O
Head of Household Date of Birth (HOH DOB)	C

This operation returns an EBA ID that is generated by the EBT System. Use of this information by the WIC MIS is optional.

The following table lists the processing rules:

<b>Rule ID</b>	<b>Description</b>
	The EBT System shall validate that the MIS Household ID does not already exist for calling WIC Authority.
	The EBT System shall validate that the HOH DOB is present and is a valid date if HOH Name was provided.

Note that the EBT System does not check whether or not the address already exists. The EBT System expects that the MIS shall perform any necessary checks for dual participation.

#### UPDATE EBA

The Update EBA operation is used to update EBA information in the EBT System. In particular, it may be used to update the MIS Household ID associated with the EBA. The following table lists the data elements in the request:

Data element name	Notes	CC
(OLD) MIS Household ID	ID of MIS Household to which this operation applies.	M
(NEW) MIS Household ID	If present, this Household ID will be associated to the EBA and the old Household ID will be deactivated.	O
Household Address		M
HOH Name		O
HOH DOB		O

The following table lists the processing rules:

Rule ID	Description
	The EBT System shall validate that the (OLD) MIS household ID exists.
	If a (NEW) MIS Household ID is provided, then the EBT System shall validate that the New MIS household ID does not already exist.
	If a (NEW) MIS Household ID is provided, then the EBT System shall deactivate the (OLD) MIS Household ID.

#### VIEW EBA DETAILS

The View EBA Details operation causes the EBT System to display a screen with detailed information on the EBA. A SSO user must be granted access to the EBT System via the Access the EBT System operation described in 4.1.6 prior to invoking this operation. The following table lists the data elements in the request:

Data element name	CC
MIS Household ID	M

The following describes the effect of invoking this operation.

Rule ID	Description
	The EBT System shall display a screen with elements as described in the subsequent rules.
	The screen shall contain two sections: Account Details and Benefits.
	The Account Details section of screen shall display the MIS Household ID, Account Status, Household Address, and a list of cards associated with the account (active or inactive).
	The list of cards shall be organized into a grid with the following columns: Actions (described below), Card Number, Card Status, Cardholder Status, Cardholder Type, Cardholder Name, and Cardholder Birth Date.
	The following Actions are possible for active cards (depending on the security level of the user): Change PIN, Deactivate Card, Replace Card, View Transactions.
	For inactive cards, the only possible Action is View Transactions.
	The list of cards shall be sorted so that the active cards are on top following by a sort with the primary card on top.
	The benefits section shall be subdivided according to the date ranges of benefits.
	The benefit sections shall be sorted with current benefits on top followed by benefits that are available soonest.
	The header for each benefits section shall include the date range of the benefits.
	The benefits shall be arranged in a grid with the following columns: category, subcategory, unit of measure and quantity.

#### GET EBA DETAILS

The Get EBA Details operation causes the EBT System to return detailed information on the EBA. The following table lists the data elements in the request:

Data element name	CC
MIS Household ID	M

The following data elements are returned:

Data element name
Household Address (Mailing Address)
MIS Household ID

Head of Household (HOH) Name
Head of Household Date of Birth (HOH DOB)

The following describes the effect of invoking this operation.

Rule ID	Description
	The EBT System shall display a screen with elements as described in the subsequent rules.
	The screen shall contain two sections: Account Details and Benefits.
	The Account Details section of screen shall display the MIS Household ID, Account Status, Household Address, and a list of cards associated with the account (active or inactive).
	The list of cards shall be organized into a grid with the following columns: Actions (described below), Card Number, Card Status, Cardholder Status, Cardholder Type, Cardholder Name, and Cardholder Birth Date.
	The following Actions are possible for active cards (depending on the security level of the user): Change PIN, Deactivate Card, Replace Card, View Transactions.
	For inactive cards, the only possible Action is View Transactions.
	The list of cards shall be sorted so that the active cards are on top following by a sort with the primary card on top.
	The benefits section shall be subdivided according to the date ranges of benefits.
	The benefit sections shall be sorted with current benefits on top following by benefits that are available soonest.
	The header for each benefits section shall include the date range of the benefits.
	The benefits shall be arranged in a grid with the following columns: category, subcategory, unit of measure and quantity.

#### GET HOUSEHOLD ID USING CARD NUMBER

The Get EBA Details operation causes the EBT System to return detailed information on the EBA. The following table lists the data elements in the request:

Data element name	CC
Card Number	M

The following data elements are returned:

Data element name
Household ID
Card Status Date
Card Status
Cardholder Type

The following describes the effect of invoking this operation.

Rule ID	Description
	The EBT System shall display a screen with elements as described in the subsequent rules.

## BENEFIT MAINTENANCE

Benefit maintenance comprises operations for maintaining benefit information associated with an EBA in the EBT System. The following table lists benefit maintenance operations.

Operation
Add / Adjust Benefits
Get Benefit Balance

## DATABASE OF RECORD AND INTERFACE POINT(S)

The following has been identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality:

<b>Database of Record</b>	MIS
<b>Interface</b>	MIS

## ADD / ADJUST BENEFITS

The Add / Adjust Benefits operation is used to add or remove benefits from an EBA in the EBT System. It is either a debit or a credit of a benefit amount. In particular, this operation is used for benefit issuance. The following table lists the data elements:

Data element name	CC
MIS Household ID	M
Credit/Debit Indicator	M

Card Number (Offline)	I
Reason Code	M
A list of the following elements:	
Benefit ID	O
Benefit Begin Date	M
Benefit End Date	M
Category Code	M
Subcategory Code	M
Benefit Quantity	M

The following table lists the processing rules:

Rule ID	Description
	The EBT System Processor shall validate that the MIS Household ID exists and is active.
	The EBT System Processor shall validate that the Benefit End Date is after the Benefit Begin Date.
	The EBT System Processor shall validate that the combination of Category Code and Subcategory Code is valid.
	If the transaction is a debit, then the Benefit Begin Date and Benefit End Date must exactly match the Benefit Begin Date and Benefit End Date for the categories and subcategories to be debited.
	If the transaction is a debit, then the EBT System Processor shall only perform the debit if there is sufficient balance to post the entire debit.
	If the transaction is a credit, then the EBT System Processor shall validate that the total Benefit Quantity (units) available for the Category Code and Subcategory Code on a given date shall not exceed 999.99 (this would exceed the maximum balance that can be returned in an X9.93 message).
	The EBT System Processor shall validate that the Reason Code is defined for the WIC Authority.
	If the transaction is a credit, then the EBT System Processor shall validate that the Benefit Begin Date and Benefit End Date does not "overlap" with existing benefits (i.e. there are not existing benefits where Benefit Begin Date < existing benefit end date < Benefit End Date or existing benefit begin date < Benefit End Date < existing benefit end date).

---

**GET BENEFIT BALANCE**

The Get Benefit Balance operation is used to retrieve benefit information for EBA. The following table lists the data elements in the request:

<b>Data element name</b>	<b>CC</b>
WIC Authority ID	M
Card Number	C
MIS Household ID	C
Request Begin Date	O
Request End Date	O

Note that either the Card Number or MIS Household ID parameter must be present.

A list of the following data elements is returned:

<b>Data element name</b>	
Benefit ID	
Category Code	
Category Description	Long
Subcategory Code	
Subcategory Description	Long
Unit of Measure Description	
Available Benefit Quantity	
Manual Authorization Quantity	
Active Hold Quantity	
Benefit Begin Date	
Benefit End Date	

The following table lists the processing rules:

<b>Rule ID</b>	<b>Description</b>
	The EBT System Processor shall validate that the MIS Household ID exists and is active.
	If only the current balance is requested, then the EBT System Processor shall only return records where the current date is between the Benefit Begin Date and Benefit End Date.

	If all benefits are requested, then the EBT System Processor shall return the current balance plus any benefits available in the future. Expired benefits are not returned.
--	---

## LOCAL AGENCY MAINTENANCE

Local agency maintenance comprises operations for maintaining local agency information needed by the EBT System. Storage of local agency information is optional and depends upon whether or not the WIC authority is organized using local agencies and wishes for the EBT System to enable certain functionality that makes use of local authority.

<b>Operation</b>
Create Local Agency
Update Local Agency
Deactivate Local Agency

## DATABASE OF RECORD AND INTERFACE POINT(S)

The following has been identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality:

<b>Database of Record</b>	MIS
<b>Interface</b>	MIS

## CREATE LOCAL AGENCY

The Create Local Agency operation creates a clinic information record in the EBT System. The following table lists the data elements in the request:

Data element name	Notes	CC
Local Agency ID		M
Local Agency Name		M
Local Agency Address	This is required if the EBT System is providing card inventory management services.	O
Phone Number	This is required if the EBT System is providing card inventory management services.	O
Local Agency Contact Name	If the EBT System is providing card inventory management services, then will be default name for directing card shipments to the clinic.	O

The following describes the processing rules associated with this operation:

Rule ID	Description
	The EBT System shall validate that Local Agency ID does not already exist for the calling system.

#### UPDATE LOCAL AGENCY

The Update Local Agency operation updates the clinic information record in the EBT System. The following table lists the data elements in the request.

Data element name	CC
Local Agency ID	M
Local Agency Name	M
Local Agency Address	O
Phone Number	O
Local Agency Contact Name	O

The following describes the processing rules associated with this operation:

Rule ID	Description
	The EBT System shall validate that Local Agency ID already exists for the calling system.

#### DEACTIVATE LOCAL AGENCY

The Deactivate Local Agency operation is used to deactivate a clinic in the EBT System. the EBT System will not accept transactions from a clinic once it has been deactivated. The following table lists the data elements in the request:

Data element name	Notes	CC
Local Agency ID		M
Local Agency Deactivation Date	If this parameter is NULL, then the EBT System assumes the current date.	O

The following table lists the processing rules:

Rule ID	Description
	The EBT System Processor shall validate that the Local Agency ID already exists.

	The EBT System shall update the status associated with the local agency to indicate that it is no longer active. Note that the local agency record is not deleted from the EBT System.
--	--

## CLINIC MAINTENANCE

Clinic maintenance comprises operations for maintaining clinic information needed by the EBT System. At minimum, the EBT System needs the ID's of valid clinics so that the source of transactions may be properly logged. Moreover, the recommended division of labor stipulates that the EBT System may maintain a record of card inventory levels. This requires some basic demographic information be stored in the EBT System. The following are the recommend operations.

Operation
Insert Clinic
Update Clinic
Deactivate Clinic

## CREATE CLINIC

The Create Clinic operation creates a clinic information record in the EBT System. The following table lists the data elements in the request:

Data element name	Notes	CC
Clinic ID		M
Clinic Name		M
Clinic Address	This is required if the EBT System is providing card inventory management services.	O
Phone Number	This is required if the EBT System is providing card inventory management services.	O
Clinic Contact Name	If the EBT System is providing card inventory management services, then will be default name for directing card shipments to the clinic.	O
Local Agency ID	ID of the local agency to which the clinic belongs.	O

The following describes the processing rules associated with this operation:

Rule ID	Description
	The EBT System shall validate that Clinic ID does not already exist for the calling system.

## UPDATE CLINIC

The Update Clinic operation updates the clinic information record in the EBT System. The following table lists the data elements in the request.

Data element name	CC
Clinic ID	M
Clinic Name	M
Clinic Address	O
Phone Number	O
Clinic Contact Name	O

The following describes the processing rules associated with this operation:

Rule ID	Description
	The EBT System shall validate that Clinic ID already exists for the calling system.

## DEACTIVATE CLINIC

The Deactivate Clinic operation is used to deactivate a clinic in the EBT System. The EBT System will not accept transactions from a clinic once it has been deactivated. The following table lists the data elements in the request:

Data element name	Notes	CC
Clinic ID		M
Clinic Deactivation Date	If this parameter is NULL, then the EBT System assumes the current date.	O

The following table lists the processing rules:

Rule ID	Description
	The EBT System Processor shall validate that the Clinic ID already exists.
	The EBT System shall update the status associated with the clinic to indicate that it is no longer active. Note that the clinic record is not deleted from the EBT System.

## RETAILER MAINTENANCE

Retail maintenance comprises operations for maintaining retailer information needed by the EBT System. The following are the recommended operations.

<b>Operation</b>
Create Retailer
Update Retailer
Deactivate Retailer

#### DATABASE OF RECORD AND INTERFACE POINT(S)

The following has been identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality:

<b>Database of Record</b>	MIS
<b>Interface</b>	MIS

#### CREATE RETAILER

The Create Retailer operation is used to establish retailer information in the EBT System. The following table lists the data elements in the request:

<b>Data element name</b>	<b>Notes</b>	<b>CC</b>
MIS Retailer Number		M
Peer Group ID		M
Retailer Name		M
Retail Activation Date		M
ACH Settlement Time	This parameter is used by a MIS that chooses to provide a UI for gathering this information. The EBT System provides a UI for this and it is recommended that the EBT System be used to maintain this information.	O
Over 50%		M
Direct Connect Flag	This parameter is used by a MIS that chooses to provide a UI for gathering this information. The EBT System provides a UI for this and it is recommended that the EBT System be used to maintain this information.	O
Direct Connect Auto-recon	This parameter is used by a MIS that chooses to provide a UI for gathering this information. The EBT System provides a UI for this and it is recommended that the EBT System be used to maintain this information.	O
Total Food Sales		M
Contracting Agency		M
Retailer Address		M
Contact Name		O

Contact Phone		M
---------------	--	---

The following describes the processing rules associated with this operation:

Rule ID	Description
	The EBT System shall validate that MIS Retailer Number does not already exist for the calling system.

#### UPDATE RETAILER

The following table lists the data elements in the request:

Data element name	Notes	CC
MIS Retailer Number		M
Peer Group ID		M
Retailer Name		M
Retail Activation Date		M
ACH Settlement Time	This parameter is used by a MIS that chooses to provide a UI for gathering this information. The EBT System provides a UI for this and it is recommended that the EBT System be used to maintain this information.	O
Over 50%		M
Direct Connect Flag	This parameter is used by a MIS that chooses to provide a UI for gathering this information. The EBT System provides a UI for this and it is recommended that the EBT System be used to maintain this information.	O
Direct Connect Auto-recon	This parameter is used by a MIS that chooses to provide a UI for gathering this information. The EBT System provides a UI for this and it is recommended that the EBT System be used to maintain this information.	O
Total Food Sales		M
Contracting Agency		M
Retailer Address	Store mailing address	M
Retailer location	Address of specific location	O
Contact Name		O
Contact Phone		M

The following describes the processing rules associated with this operation:

Rule ID	Description
	The EBT System shall validate that MIS Retailer Number already exists for the calling system.

#### DEACTIVATE RETAILER

The Deactivate Retailer operation is used to deactivate a retailer in the EBT System. The EBT System will not accept transactions from a retailer once it has been deactivated. The following table lists the data elements in the request:

Data element name	Notes	CC
MIS Retailer Number		M
Retailer Deactivation Date	If this parameter is NULL, then the EBT System assumes the current date.	O

The following table lists the processing rules:

Rule ID	Description
	The EBT System Processor shall validate that the MIS Retailer Number already exists.
	The EBT System shall update the status associated with the retailer to indicate that it is no longer active. Note that the retailer record is not deleted from the EBT System.

#### CATEGORY/SUBCATEGORY MAINTENANCE

The area of category/subcategory maintenance comprises operations for maintaining the list of food categories and subcategories used by the WIC authority. The preferred solution is to use the FNS standard list of categories and subcategories. This list is maintained within the National Universal Product Code (NUPC) database (maintained by FNS).

The assumption is that an agency will be using functionality provided by the NUPC to maintain their list of food categories / sub categories and approved products (UPCs). This information will be downloaded as needed to either the MIS or the EBT environments (both will have a need for this information) for local use. It is an agency option as to whether the MIS, the EBT System, or both provide the functionality to download this information. Rationale as to where to place this functionality has been discussed previously.

The functionality described in this section assumes that the EBT System is maintaining a connection with NUPC for the purpose of retrieving UPC information and that rather

than having the MIS also support this interface, it will retrieve the category and subcategory information it needs from the EBT System. If an Agency elects to have the MIS be the master of UPC management then an interface will be required to allow the transfer of EBT needed information to the EBT system. This is envisioned to be a batch data transfer.

#### DATABASE OF RECORD AND INTERFACE POINT(S)

The following has been identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality:

<b>Database of Record</b>	NUPC
<b>Interface</b>	NUPC

#### GET CATEGORY INFORMATION

This following table lists information needed by MIS in order to maintain food categories. Ultimately, NUPC shall be the database of record for food categories. The EBT System shall maintain a link with NUPC to obtain updated food category information. This information shall be made available to the MIS from the EBT System. Note that there are no additional parameters (beyond the common parameters) for the request. A list of the following data elements is returned:

<b>Data element name</b>	
WIC Authority ID	
Category Code	
Category Description	Long
Category Description	Short
Category Begin Date	
Category End Date	

#### GET SUBCATEGORY INFORMATION

The following table lists the data elements needed by MIS in order to maintain food subcategories. Ultimately, NUPC shall be the database of record for food subcategories. The EBT System shall maintain a link with NUPC to obtain updated food subcategory information. This information shall be made available to MIS from the EBT System. Note that there are no additional parameters (beyond the common parameters) for the request. A list of the following data elements is returned:

<b>Data element name</b>
WIC Authority ID
Category Code
Subcategory Code
Subcategory Long Description
Subcategory Short Description
Unit of Measure Abbreviation
Require Prescription Flag
Subcategory Begin Date
Subcategory End Date

**CARDHOLDER/CARD MAINTENANCE**

Cardholder maintenance comprises operations for maintaining cardholders in the EBT System. Cardholders and cards are required in order to access EBT benefits associated with an EBA in the EBT System.

<b>Operation</b>
Add Cardholder UI

The EBT System implements additional operations for updating cardholder information as well as operations for deactivating and replacing cards. These operations are not included as part of the recommended interface because it is expected that these operations will be accessible via the View EBA Details screen described earlier.

**DATABASE OF RECORD AND INTERFACE POINT(S)**

The following has been identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality:

<b>Database of Record</b>	EBT
<b>Interface</b>	Either MIS or EBT

**ADD CARDHOLDER UI**

The following table lists the general data elements that are required for establishing a cardholder in the EBT System. This operation causes the EBT System to display a screen

that prompts for the input of any optional parameters not supplied. For example, if the cardholder name is not supplied, then the screen will accept input of a cardholder name entered by the user. The following table lists the data elements in the request:

Data element name	CC
MIS Household ID	M
Card Number	O
Cardholder Name	O
Date of Birth	O
Cardholder Type	O
Phone Number	O

The following describes the effect of invoking this operation.

Rule ID	Description
	The EBT System shall display a screen with elements as described in the subsequent rules.
	The screen shall have input fields for the following: card number, cardholder type, PIN block, name (composed of subcomponents in name object), and birth date.
	The MIS Household ID is displayed on the screen.
	Any of the input fields are pre-populated with any of the optional parameters that are supplied when invoking this operation.
	If the card number is not supplied, the screen shall have the capability of acquiring the card number from a card reader attached to the local machine.
	The screen shall retrieve the encrypted PIN block from a secure PIN pad attached to the local machine.
	The acquired PIN block shall be masked (i.e. it shall not be displayed in the clear).
	When the user saves the information, the card and cardholder are linked to the EBA associated with the MIS Household ID.

---

#### ADD CARDHOLDER/CARD

The following table lists the general data elements that are required for establishing a cardholder and card in the EBT System.

Data element name	CC
MIS Household ID	M
Card Number	M

Cardholder Name	M
Cardholder Date of Birth (DOB)	M
Cardholder Type	M
Encrypted PIN Block	O
Cardholder Phone Number	O

The following describes the effect of invoking this operation.

Rule ID	Description
	The EBT System Processor shall validate that the MIS Household ID exists and is active.
	The EBT System Processor shall validate that the Card Number exists and has not been previously issued.
	If the Cardholder Type is "Primary", then the EBT System Processor shall validate that there is not already an active primary cardholder associated with the given household.
	If the Cardholder Type is "Secondary", then the EBT System Processor shall validate that there is already a primary cardholder associated with the household.
	If the Cardholder Type is "Secondary", then the EBT System Processor shall validate that the addition of the new cardholder will not exceed the maximum number of allowed cardholders per household.
	If the Encrypted PIN Block is supplied and is valid, then the EBT System Processor shall translate the Encrypted PIN Block into a new encrypted PIN block that is suitable for internal database storage.
	If all validations are passed, then the EBT System Processor shall create a new cardholder record and associate the cardholder with the given card and household.

---

#### SUBMIT PIN

This operation is used to associate a PIN with the cardholder of the given card.

The following table lists the general data elements

Data element name	CC
Card Number	M
Encrypted PIN Block	M

New PIN Flag	M
--------------	---

The following describes the effect of invoking this operation.

Rule ID	Description
	The EBT System Processor shall validate that the Card Number is active and associated with a valid EBA.
	The EBT System Processor shall validate that the Encrypted PIN Block is valid.
	If the Encrypted PIN Block is supplied and is valid, then the EBT System Processor shall translate the Encrypted PIN Block into a new encrypted PIN block that is suitable for internal database storage.

---

#### GET CARDHOLDERS/CARDS

This operation is used to get a list of cardholders and cards. It is designed to provide maximum flexibility to the MIS and to support the varying methods that different MIS's may use to search for cards/cardholders.

The following table lists the general data elements in the request:

Data element name	CC
Cardholder Name	O
Cardholder DOB	O
Cardholder Address	O
Card Number	O
Household ID	O
Cardholder Type	O
Card Status	O

A list of the following data elements is returned:

Data element name	CC
Cardholder ID	
Cardholder Name	
Cardholder DOB	
Cardholder Address	
Card Number	
Household ID	

Cardholder Type	
Card Status	
Card Activation Date	
Card Deactivation Date	

---

#### GET CARDHOLDERS/CARDS FOR HOUSEHOLD

While the operation above can be used to retrieve a list of cardholders and cards for a household, this operation provides a simpler and more “tuned” interface for doing so.

The following table lists the general data elements

Data element name	CC
Household ID	M
Start Date	O
End Date	O

A list of the following data elements is returned:

Data element name	CC
Card Number	
Cardholder ID	
Cardholder Name	
Card Status Date	
Card Status Code	
Cardholder Type	

---

#### DEACTIVATE CARD

This operation is used to deactivate a card. A common use for this operation occurs when a client wishes to report a card as lost or stolen. Usually a client will not know the card number of the card that they are reporting as lost or stolen. So, it is advised that the calling system first use Get Cardholders/Cards or Get Cardholders/Cards By Household in order to find the card number of the card to be deactivated.

The following table lists the general data elements:

Data element name	CC
Card Number	M
Card Status Code	M

The following describes the effect of invoking this operation.

Rule ID	Description
	The card status is changed to the value in Card Status Code. The card will no longer be usable for transactions.

---

#### REPLACE CARD

This operation is used to replace a card.

The following table lists the general data elements

Data element name	CC
Cardholder ID	M
New Card Number	M
Card Status Code	M

The following describes the effect of invoking this operation.

Rule ID	Description
	The EBT System Processor shall validate that the Card Number exists and has not been previously issued.
	If the cardholder currently has an active card, then the existing active card is deactivated.
	Since the PIN is associated with the cardholder, the PIN is unchanged for the new. Note that the PIN may still be changed by invoking the Submit PIN operation.

---

#### UNLOCK PIN

This operation is used to remove a PIN block from a card and reset the invalid PIN attempt count to zero.

The following table lists the data elements in the request:

Data element name	CC
Card Number	M

The following describes the effect of invoking this operation.

Rule ID	Description
	The EBT System Processor shall validate that the Card Number is active and associated with a valid EBA.
	The PIN block is removed and the invalid PIN attempt count is reset to 0.

## BATCH FILE INTERFACES

There may be a need for the communication of bulk data between the MIS and EBT system. Use of this form of interface is at the discretion of the application designer and depends upon where certain EBT related functionality has been implemented. It is expected that this form of data interchange will be implemented using the following standard batch file formats.

## GENERAL FILE STRUCTURE

The work group considered defining a standard header and trailer record as an envelope to incase the following batch detail record formats and to define standard file confirmation protocols and error reporting mechanisms for all file types. However, because some of the more modern data transfer implementations, such as XML, already provide the functionality normally associated with headers and trailers, and have pre-defined error handling, it was decided to leave this to the discretion of the application designer as an implementation consideration. However, a standard set of file management data that should be conveyed as a component of each file transfer has been defined. It is up to the application designer as to how to convey this information. These data items could be in a standard header and trailer format, they can be conveyed as XML data elements or even via file naming conventions and FTP set up.

## DATA REQUIRED IN ALL FILES

The following list of data elements must be included in each file transmission.

Data element name	CC	Contents
File Type	M	Standard identifier unique to each file type
Originator of file	M	Unique identifier of the file origination entity
Target of file	M	Unique identifier of the intended destination for the file
File sequence number	M	A unique number that is incremented by 1 for each file that is successfully transferred
Date and Time	M	Date and time the file was created
Format and version	M	An indicator of the format and version of the file being transferred

Security	M	User id, password, or token used to authenticate the file
Record count	M	Count of detail records contained in the file
BIN	O	Bin associated with file

The implementation of the batch interface should provide the functionality to:

- Confirm to the sending party that the file was received
- Report a file level error (e.g. wrong sequence, wrong record count, etc.)
- Report a detail record error (e.g. provide specific record identifier and indication of specific error)

#### DAILY INTERFACE RECONCILIATION BATCH FILE

At a specified time each day, the EBT System shall create a file that contains information for each Adjust (add / update / delete) Benefits transaction that was approved during the prior 24 hour period. The MIS should use this information to match against its view of successful Adjust Benefits transactions initiated by the MIS during the same period.

#### DATABASE OF RECORD AND INTERFACE POINT(S)

The following has been identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality:

<b>Database of Record</b>	MIS
<b>Interface</b>	MIS

#### REQUIRED DATA

Data element name	CC	Contents
Trace number	M	MIS trace number
Date and Time	M	When transaction occurred
Clinic ID	M	Clinic where issuance originated
User ID	M	System user initiating issuance
Household ID	M	WIC Family ID
Benefit Number	O	Unique identifier for this benefit

Benefit Begin Date	M	First date of benefit availability
Benefit End Date	M	Last date of benefit availability
Activity type	M	Debit or Credit
Count of Cat / Sub Cats	M	Number of following cat / sub cats
Cat / Subcat	M	Standard Code
Quantity	M	Quantity added or removed

#### REDEMPTION BATCH FILE

A MIS may want to receive a daily file of redemption information (originated by the EBT system) for its own purposes. This file will be provided in the format of an X9.93:Part 2 Auto-reconciliation file.

#### DATABASE OF RECORD AND INTERFACE POINT(S)

The following has been identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality:

<b>Database of Record</b>	EBT
<b>Interface</b>	MIS

#### VENDOR BATCH FILE

The MIS is the master of vendor data. This batch interface (which is an alternative to the real time interface), provides functionality to allow the EBT system to have and maintain a current list of authorized WIC vendors, including minimal demographics and their peer group.

#### DATABASE OF RECORD AND INTERFACE POINT(S)

The following has been identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality:

<b>Database of Record</b>	MIS
<b>Interface</b>	EBT

#### REQUIRED DATA

Data element name	CC	Contents
Activity type	M	Add or Delete

Vendor Number	M	Agency vendor identifier
Store Name	M	Unique name associated with location
Peer Group ID	M	Agency assigned peer group
Store Location	M	street, city, state, Zip
Store Mail address	M	street, city, state, Zip
Corporate affiliation	O	Name of corporation
Store contact name	M	Contact point
Store phone number	M	Store phone number
Effective Date	M	When this did or will become active
De-activate date	O	When store is to be deactivated
Agency	O	WIC agency
Clinic	O	Clinic Agency

#### CAT / SUBCAT BATCH FILES

This document has recommended that the EBT system provides the interface with the NUPC database since it is the EBT system that uses this information. (Note: An assumption is that the NUPC will provide the functionality necessary for managing and maintaining an individual state's list of approved cat / subcats and UPCs.)

If the application designer elects to place the NUPC interface within the MIS then a batch file as described below must be provided to convey a current list of allowable food category and sub category to the EBT system. The D6 record in the NUPC will provide this information.

#### DATABASE OF RECORD AND INTERFACE POINT(S)

The following has been identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality:

<b>Database of Record</b>	MIS
<b>Interface</b>	EBT

#### REQUIRED DATA

Data element name	CC	Contents
Activity type	M	Add or Update

Category	M	Standard Category Code
Sub Category	M	Standard Sub Category code
Receipt description	M	Description used on balance inquiry
Unit of measure	M	Standard unit of measure
Activation Date	O	If being newly activated
Deactivation Date	O	If being deactivated

#### MAXIMUM ALLOWABLE PRICE BATCH FILE

This document has recommended that maximum pricing functionality be placed in the EBT system since it is the database of record for the redemption data used to calculate maximum prices and it is the user of this data as a key component of transaction approval and settlement.

However, If the application designer elects to place the calculation and management of the maximum allowable prices in the MIS, then this interface will be used to pass the maximum price information, by UPC and by peer group, to the EBT system. Note that placing this functionality in the MIS requires the use of the Redemption File defined above to provide the MIS with the information required for the calculation and maintenance of maximum prices.

#### DATABASE OF RECORD AND INTERFACE POINT(S)

The following has been identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality:

<b>Database of Record</b>	MIS
<b>Interface</b>	EBT

#### REQUIRED DATA

<b>Data element name</b>	<b>CC</b>	<b>Contents</b>
UPC / PLU	M	Product specific code
Product Description	M	Unique name associated with product
Broadband flag	M	Can the product be purchased with sub cat 000
Rebate Flag	M	Is the item subject to a rebate
Pharmacy flag	M	Allowable for purchase in a pharmacy

Effective Date	O	Date to starting using product
Deactivate date	O	Date to no longer allow the product
Category Code	M	Must be in cat subcat table
Sub Category code	M	Must be in cat subcat table
Exchange Size	M	Convert product packaging size into standard unit of measure for sub cat
Number of peer groups	M	Number of following peer group / max prices combinations
Peer Group ID	M	Peer group from Vendor Table
Maximum Price	M	Calculated allowable maximum price for this product.

#### BENEFIT MONTH RECONCILIATION BATCH FILE

WIC grant accounting and financial management is usually organized around a “Benefit Month” which is an accounting of all food benefit issuance with a first date to spend that falls within a given calendar month. The MIS determines benefit eligibility and authorizes benefit to households while the EBT system is responsible for the management of household benefit accounts and the disbursement of those benefits.

This optional batch interface is designed to provide a final point of reconciliation of all benefit activity for a given month against the WIC financial accounting for that month as documented in the 798 report to FNS. This accounting will occur at the close out of a benefit month which occurs when all benefits issued for that month have either been redeemed or have expired. This is generally 31 days (or more depending on the need for adjustments and other late closing transactions) after the last day of the month. The EBT system will generate and send to the MIS a batch file that documents the issuance and subsequent disbursement of all benefits that were authorized for a benefit month. The MIS will reconcile this against its accounting of all benefits that were authorized to WIC participants for the same benefit month.

#### DATABASE OF RECORD AND INTERFACE POINT(S)

The following has been identified as the system that is the database of record for this functionality and the system that will act as the interface to the data or functionality:

<b>Database of Record</b>	MIS / EBT
<b>Interface</b>	MIS

## REQUIRED DATA

<b>Data element name</b>	<b>CC</b>	<b>Contents</b>
Benefit Month	M	Benefit Month being reconciled
WIC Household ID	M	Household ID in EBT and MIS system and a final agency wide total
Last Date to Spend	M	Last day of benefit availability
Dollars settled	M	Dollars paid to retailers for this household's redemption
Number of cat / sub cats	M	Number of following entries
Cat / Sub Cat	M	Standard codes
Action	M	I = issued, v=voided (by MIS), e=expired, r=redeemed
Quantity	M	Total quantity for each action type

## APPENDIX A - COMPOSITE DATA ELEMENTS

The following data elements are composed of multiple sub-elements.

### A.1 ADDRESS

This object represents a mailing address.

Data element name	CC
Address 1	M
Address 2	O
City	M
State	M
Zip	M

### A.2 NAME

This object represents a person's name.

Data element name	CC
First Name	M
Middle Name	O
Last Name	M

## APPENDIX B - DATA DICTIONARY

Data element name	Description
ACH Settlement Time	For a direct connect, this is the time that the EBT System uses for processing retail activity for the purpose of computing the retail settlement amount. the EBT System will process transactions that occurred during the 24 hours prior to this time.
Active Hold Quantity	Quantity of benefit in active hold at grocer.
Available Benefit Quantity	Quantity of available benefit units in the standard unit of measure for the category and subcategory.
Benefit Begin Date	First date on which benefits may be used.
Benefit End Date	Last date on which benefits may be used.
Benefit ID	A unique number identifying a benefit issuance.
Card Activation Date	Date that card is activated.
Card Deactivation Date	Date that card is deactivated.
Card Number	The number encoded on the magnetic stripe of a card.
Card Status	A code indicating the status of the card. The possible values are as follows:
Card Status Date	Date that card status was changed to given value in Card Status.
Cardholder Date of Birth	Date of birth associated with cardholder. It may be the cardholder's DOB, the head of household, or in the case of an alternate, the alternate's DOB or either of the above.
Cardholder ID	Unique EBT System generated identification number for cardholder that may be used for other cardholder/card based transactions.
Cardholder Name	Name of the cardholder.
Cardholder Phone Number	Phone number for cardholder.
Cardholder Type	Indicates whether the cardholder is the primary cardholder or a proxy cardholder.
Category Code	A code identifying the type of food product.
Category Begin Date	The date for which the category shall become available for use.
Category End Date	The last date for which the category shall be used.
Category Long Description	A long description of the category suitable for printing or displaying in areas where display width is not a concern.

Category Short Description	A short description of the category suitable for displaying on screen and reports where display width is a concern.
Clinic Address	Address of clinic.
Clinic Contact Name	Primary contact person at clinic.
Clinic ID	MIS assigned identifier for clinic.
Clinic Name	Name of clinic.
Clinic Phone Number	Phone number of clinic.
Contact Name	The name of a point of contact at the retail location.
Contracting Agency	The MIS Clinic ID of the clinic that contracts with the retailer.
Credit/Debit Indicator	Indicates if the values are to be credited (added) or debited (subtracted) to/from the account.
Date of Birth	Date of birth of the cardholder. This is typically used as a security question for calls to customer service.
Date/Time	GMT date and time on the MIS when an operation is initiated.
Direct Connect Auto-recon	For a direct connect, this signals whether or not the EBT System generates an auto-reconciliation file for the location.
Direct Connect Flag	Signifies whether or not the retailer connects directly to the EBT System for transactions or comes through the gateway.
Encrypted PIN Block	Triple DES DUKPT encrypted PIN block.
Head of Household Name	Name of the head of household. The head of household may be used by the MIS to identify the responsible party for the family/group/household.
Head of Household Date of Birth	Date of birth for the head of household. This is usually used a security question when handling queries from the head of household over the phone.
Household Address	This is the address for the household used for any EBT related correspondence.
Manual Authorization Quantity	The quantity of benefits involved with a manual auth purchase.
MIS Clinic ID	If the operation is initiated from a clinic, then this is the ID of the initiating clinic.
MIS Household ID	This is the household ID assigned by the MIS.
MIS Retailer Number	A number assigned by the MIS identifying the retailer.
MIS System ID	For direct service calls, this value should be equal to System ID. It is used by the EBT System to log the calling MIS System ID for operations invoked by the EBT System screens on behalf of the MIS.

Name of User	Name of the user.	
New PIN Flag	Indicates if Submit PIN operation is for selecting a new PIN or changing an existing PIN.	
Over 50%	Signifies whether or not the volume of WIC sales is over 50% of the total sales for the retailer.	
Password	Password used by the system to log on to the EBT System. This parameter is always encrypted.	
Peer Group ID	The peer group assigned to the retailer.	
Reason Code	Reason for a benefit adjustment.	
Request Begin Date	Causes any benefits that are valid (current or future) after this date to be retrieved.	
Request End Date	Causes any benefits that are valid (current or future) prior to this date to be retrieved.	
Require Prescription Flag	Indicates if medical documentation is necessary in order to issue from this subcategory.	
Retail Activation Date	The date on which the retailer becomes active. This is the date on which the EBT System will start accepting transactions from the retailer.	
Retail Address	Address of the retail location.	
Retail Contact Phone	A phone number for the retail location.	
Retail Deactivation Date	The date on which the retailer is no longer active. the EBT System will not accept transactions from the retailer after this date.	
Retailer Name	The name of the retailer.	
Security Token	A token issued by the EBT System when a systems logs on to the EBT System. The issued token is required for all subsequent operations.	
SSO Action	Indicates type of action for Access the EBT System operation. Currently, the only accepted value is logoff.	
Subcategory Begin Date	The date for which the subcategory shall become available for use.	
Subcategory Code	A code further identifying the type of food product within a category.	
Subcategory Description	Description of the food subcategory.	
Subcategory End Date	The last date for which the subcategory shall be used.	
Subcategory Description	Long	A long description of the subcategory suitable for printing or displaying in areas where display width is not a concern.
Subcategory Description	Short	A short description of the subcategory suitable for displaying in areas (particularly POS stand-beside receipts) where display width is a concern.

System ID	An ID assigned by the EBT System to the MIS or a subsystem within the MIS. The System ID is used for security and tracking purposes within the EBT System. In particular, if an MIS chooses to implement SSO with the EBT System, then the MIS must maintain a separate System ID for any subsystem that maintains its own set of usernames.
Total Food Sales	The volume of total food sales reported by the retailer.
Trace Number	A unique value supplied by the MIS to be associated with the particular invocation of the operation.
Unit of Measure Abbreviation	An abbreviated description of the unit of measure associated with the food subcategory.
Unit of Measure Description	Description of the unit of measure associated with the food subcategory.
User Address	Contact address of the user.
User Email Address	Email address of the user.
Username	String used to identify user in the EBT System. Used in conjunction with User System ID to uniquely identify a user.
WIC Authority ID	ID of WIC authority for which the operation is being initiated.
Workstation ID	ID of the workstation initiating the operation.

**APPENDIX C - ABBREVIATED TERMS**

<b>Abbreviation</b>	<b>Definition</b>
<b>ACH</b>	Automated Clearing House
<b>DOB</b>	Date of Birth
<b>EBA</b>	Electronic Benefit Account
<b>EBT</b>	Electronic Benefits Transfer
<b>HOH</b>	Head of Household
<b>MIS</b>	Management Information System
<b>NTE</b>	Not To Exceed
<b>NUPC</b>	National UPC (Database)
<b>SSO</b>	Single Sign On
<b>UPC</b>	Universal Product Code
<b>WIC</b>	Women, Infants, and Children