



WIC EBT Technical Implementation Guide

This guidance is to provide the implementation framework for Online and Smart Card WIC EBT. FNS expects all stakeholders supporting WIC EBT to incorporate these guidelines into all WIC EBT systems that have been funded by federal funds provided by the WIC Program.

Date : September 2011

Table of Contents

Document History.....	v
1 Scope.....	1
2 References	1
3 Terms and definitions	2
4 Symbols (and abbreviated terms).....	2
4.1 Representation abbreviations	2
4.2 Abbreviated terms	2
5 WIC Online EBT message structure	2
6 WIC Online EBT data elements	3
6.1 WIC Online EBT data element directory.....	3
6.2 WIC Online EBT data element rules	13
6.2.1 Date and time, transaction (bit 12).....	13
6.2.2 UPC/PLU data (bit 62-2)	13
6.2.3 EBT balance information (dataset identifier “EA”).....	14
6.2.4 Earliest benefit expiration date (dataset identifier “EF”)	14
6.2.5 EBT Data (dataset identifier “PS”) additional requirements.....	15
6.2.6 Key management data (bit 96).....	15
7 WIC Online EBT messages and transactions.....	15
7.1 Mandatory WIC Online EBT transaction types	16
7.1.1 Message flows	16
7.1.2 Exception message flows.....	16
7.1.3 Message errors	16
7.2 WIC online EBT Transaction processing	17
8 WIC Online EBT message classes.....	18
8.1 Authorization message class	18
8.2 Verification message class.....	18
8.2.1 Verification message processing codes.....	19
8.3 Financial Presentment message class.....	20
8.3.1 Partial approvals.....	22
8.3.2 Discounts and coupon information	22
8.3.3 Surcharges information	23
8.3.4 Store and forward transactions	23
8.3.5 Declined transactions	24
8.4 File action message class	24
8.4.1 EBT file update request data (dataset identifier “EC”).....	25
8.4.2 EBT file update response data (dataset identifier “ED”)	25
8.5 Reversal message class	26
8.5.1 Reversal message processing rules	27
8.6 Administrative message class	28
8.7 Network management message class.....	29
9 WIC Smart Card EBT message processing	30
10 WIC Online and Smart Card EBT Files	31
10.1 File structure.....	31
10.1.1 File names	31

10.1.2	Transmission files	31
10.1.3	File envelope naming conventions	32
10.1.4	File errors	33
10.1.5	File processing rules	34
10.1.6	File records.....	34
10.1.7	Record formatting.....	34
10.2	WIC EBT Files data element directory	35
10.3	WIC EBT file data element rules.....	44
11	WIC EBT File Formats	47
11.1	WIC claim files.....	47
11.1.1	WIC claim file super header record (“A0”).....	47
11.1.2	WIC claim file header record (“A1”).....	48
11.1.3	WIC claim file detail record (“D4”).....	49
11.1.4	WIC claim file addenda record (“E3”).....	50
11.1.5	WIC claim file trailer record (“Z1”).....	51
11.1.6	WIC claim super trailer record (“Z2”)	52
11.2	WIC auto-reconciliation file	52
11.2.1	WIC auto-reconciliation super header record (“A0”).....	52
11.2.2	WIC auto-reconciliation header record (“A1”).....	53
11.2.3	WIC auto-reconciliation detail record (“D4”)	54
11.2.4	WIC auto-reconciliation addenda record 1 (“E1”).....	55
11.2.5	WIC auto-reconciliation addenda record 2 (“E2”).....	56
11.2.6	WIC auto-reconciliation adjustment record (“D5”)	57
11.2.7	WIC auto-reconciliation trailer record (“Z1”).....	58
11.2.8	WIC auto-reconciliation super trailer record (“Z2”)	59
11.2.9	WIC auto-reconciliation amounts processing	59
11.3	WIC UPC/PLU file.....	61
11.3.1	WIC UPC/PLU header record (“A1”)	61
11.3.2	WIC UPC/PLU detail record (“D4”).....	61
11.3.3	WIC UPC/PLU abbreviated detail record (“D6”)	62
11.3.4	WIC UPC/PLU trailer record (“Z1”).....	63
11.4	WIC hot card list file	64
11.4.1	WIC hot card list header record (“A1”).....	64
11.4.2	WIC hot card list detail record (“D4”)	64
11.4.3	WIC hot card list trailer record (“Z1”).....	65
11.5	WIC acknowledgment file	65
11.5.1	WIC acknowledgment header record (“A2”).....	66
11.5.2	WIC acknowledgment file rejection detail record (“D7”).....	66
11.5.3	WIC acknowledgment card acceptor detail record (“D8”)	67
11.5.4	WIC acknowledgment transaction rejection addenda record (“E5”)	68
11.5.5	WIC acknowledgment trailer record (“Z1”).....	68
11.6	WIC state benefit file	69
11.6.1	WIC state benefit header record.....	69
11.6.2	WIC state benefit detail record	69
11.6.3	WIC state benefit addenda record	70
11.6.4	WIC state benefit trailer record (“Z1”).....	71
12	Processing Considerations	72
12.1	Receipt data.....	72
12.2	UPC/PLU file and National UPC database.....	74
12.3	WIC Smart Card split tender processing.....	74

12.4	WIC Smart Card EBT benefit reversal processing.....	74
Annex A	– Data element code tables.....	75
A.1	Error identifier code (“D7” and “E5” records).....	75
A.2	Integrated circuit card (ICC) result code (“D4” record).....	82
A.3	Item action code (62-ED-20, 62-PS-8).....	83
A.4	Manual voucher indicator (bit 62-ED-19 and “D4” record).....	84
A.5	Message reason codes (bit 25 and “D4” records).....	84
A.6	Purchase indicator (bit 62-ED-17 and “D4” record).....	88
A.7	File envelope identifier code.....	89
A.8	Unit of measure (bit 62-EA-8 and “D4” UPC/PLU and Claim file records).....	89
A.9	WIC State Agency identifiers.....	91
Annex B	– X9.93:2008 Updates.....	95
B.1	Part 1 – Messages.....	95
B.2	Part 2 – Files.....	96

Tables

Table 1	— WIC Online EBT messages data element requirements, continued.....	4
Table 2	— EBT balance information (dataset identifier “EA”).....	14
Table 3	— WIC Online EBT mandatory and optional transaction set.....	16
Table 4	— Verification messages mandatory and conditional data elements.....	18
Table 5	— Financial presentment messages mandatory and conditional data elements.....	20
Table 6	— File action messages mandatory and conditional data elements.....	24
Table 7	— EBT file update response data (dataset identifier “ED”).....	25
Table 8	— Reversal message mandatory and conditional data elements.....	26
Table 9	— Administrative message mandatory and conditional data elements.....	28
Table 10	— Network management messages mandatory and conditional data elements.....	29
Table 11	— Base 36 conversion.....	32
Table 12	— File envelope naming.....	32
Table 13	— Files data element directory.....	35
Table 13	— Files data element directory, continued.....	36
Table 14	— WIC claim file super header record (“A0”).....	47
Table 15	— WIC claim file header record (“A1”).....	48
Table 16	— WIC claim file detail record (“D4”).....	49
Table 17	— WIC claim file addenda record (“E3”).....	50
Table 18	— WIC claim file trailer record (“Z1”).....	51
Table 19	— WIC claim file super trailer record (“Z2”).....	52
Table 20	— WIC auto-reconciliation super header record (“A0”).....	53
Table 21	— WIC auto-reconciliation header record (“A1”).....	53
Table 22	— WIC auto-reconciliation detail record (“D4”).....	54
Table 23	— WIC auto-reconciliation addenda record 1 (“E1”).....	55
Table 24	— WIC auto-reconciliation addenda record 2 (“E2”).....	56
Table 25	— WIC auto-reconciliation adjustment record (“D5”).....	57
Table 26	— WIC auto-reconciliation trailer record (“Z1”).....	58
Table 27	— WIC auto-reconciliation super trailer record (“Z2”).....	59
Table 28	— WIC auto-reconciliation amount data element sources.....	59
Table 29	— WIC UPC/PLU header record (“A1”).....	61
Table 30	— WIC UPC/PLU detail record (“D4”).....	61
Table 31	— WIC UPC/PLU abbreviated detail record (“D6”).....	63

Table 32 — WIC UPC/PLU trailer record (“Z1”)	63
Table 33 — WIC hot card list header record (“A1”).....	64
Table 34 — WIC hot card list detail record (“D4”).....	65
Table 35 —WIC hot card list trailer record (“Z1”).....	65
Table 36 — WIC acknowledgment header record (“A2”).....	66
Table 37 — WIC acknowledgment file rejection detail record (“D7”).....	67
Table 38 — WIC acknowledgment card acceptor detail record (“D8”)	67
Table 39 — WIC acknowledgment transaction rejection addenda record (“E5”)	68
Table 40 — WIC acknowledgment trailer record (“Z1”).....	68
Table 41 — WIC state benefit header record (“A1”).....	69
Table 42 — WIC state benefit detail record (“D4”)	70
Table 43 — WIC state benefit addenda record (“E4”)	70
Table 44 — WIC state benefit trailer record	71
Table 45 —Balance inquiry receipt data.....	72
Table 46 —Purchase receipt data	73
Table 47 — Error identifier codes	75
Table 48 — Integrated circuit card (ICC) result code values.....	83
Table 49 —New Item action codes	83
Table 50 — Manual voucher indicator values	84
Table 51 — Message reason codes	84
Table 52 — Purchase indicator code values.....	88
Table 53 —File envelope identifier codes	89
Table 54 — WIC EBT Unit of measure literal values	89
Table 55 —State identifier codes and WIC Authority IDs	91

Document History

Version	Revision Date	Updates
Draft 1.0	4/8/2010	Initial draft
Draft 2.0	4/23/2010	Draft distributed for comment
Draft 3.0	7/31/2010	Reflects updates based on comments received and conference calls held to review document
Draft 3.1	8/6/2010	Reflects updates from FNS review and comments
n/a	10/22/2010	Reflects updates based on the comments received on Draft 3.1 and addition of record layouts for all WIC EBT files.
n/a	9/17/2011	Incorporates updates based on Online Summit held 2/10/2011 in Grand Rapids, MI and subsequent conference calls to resolve identified issues. Incorporates Smart Card eWIC State Agencies X9.93-2:2008 (V4) <i>File Features, Structural Content, and Data Mapping for Development Consideration</i> , Version 2.1, March 2011. Incorporates the <i>Proposal for Smartcard WIC EBT Implementation of Split Tender and Benefit Reversal Functionality</i> , June 2011, Version 1.0 (pending final FNS review). Reflects updates from FNS review and comments.

WIC EBT – Technical Implementation Guide

X9.93 Part 1 Messages is intended for use by any EBT application using online message exchange to complete transactions. X9.93 Part 2 Files is intended for use for any EBT application exchanging files.

This document provides specific implementation guidelines of the X9.93 standards for parties processing a specific subset of EBT transactions, namely, WIC Online EBT transactions and WIC Online and Smart Card EBT files. The Technical Implementation Guide applies to retail merchants, POS system integrators, cash register vendors, POS terminal vendors, third party processors and EBT Card Issuer processors. The Implementation Guide describes how the ANS X9.93 Part 1 Messages and Part 2 Files standards are to be implemented in the WIC EBT environments and incorporates changes recommended to the X9.93 2008 versions. For an overview of the WIC EBT Program, refer to the WIC Operating Rules. This document incorporates and supersedes the technical requirements in the *WIC EBT System Implementation of WIC Cash Value Voucher (CVV)* published September 2008.

1 Scope

The implementation of a WIC Online EBT application within a state needs to insure consistency to allow for adoption and ease of implementation for WIC Vendors providing WIC benefits.

For WIC Online EBT, Sections 5 through 8 in this Technical Implementation Guide identify the requirements for utilizing the X9.93 Part 1 Messages.

For WIC Smart Card EBT, the messaging between the smart card and the card acceptor device (CAD) at the point of sale (POS) will be added to Section 9 in the future.

This Technical Implementation Guide also addresses the requirements for utilizing X9.93 Part 2 Files for WIC Online and Smart Card EBT implementations in Section 10. Any restrictions, clarifications, and/or additional requirements are described.

A list of the specific changes recommended to the *X9.93 ANS X9.93 Financial transaction messages – Electronic benefits transfer (EBT) – Part 1: Messages* and *X9.93 ANS X9.93 Financial transaction messages – Electronic benefits transfer (EBT) – Part 2: Files* appears in Annex B. These changes shall be incorporated in WIC Online and Smart Card EBT implementations. Users of the Technical Implementation Guide shall reference the X9.93 standards in developing their implementations.

2 References

ANS X9.93:2008 Financial transaction messages – Electronic benefits transfer (EBT) – Part 1: Messages is referred to as “X9.93 Part 1 Messages” in this document.

ANS X9.93:2008 Financial transaction messages – Electronic benefits transfer (EBT) – Part 2: Files is referred to as “X9.93 Part 2 Files” in this document.

Operating Rules – Women, Infants and Children (WIC) – Electronic benefits transfer (EBT) is referred to as “WIC Operating Rules” in this document.

3 Terms and definitions

Additional terms and definitions beyond those identified in X9.93 Part 1 Messages or X9.93 Part 2 Files are defined in the WIC Operating Rules.

4 Symbols (and abbreviated terms)

The symbols and abbreviated terms in the standards are to be used in the implementations of WIC EBT. The following sections provide additional clarification.

4.1 Representation abbreviations

In Table 1 of X9.93 Part 1 Messages and X9.93 Part 2 Files, signed data elements are indicated using the representation “xn”, where the values of “x” are “C” = credit and “D” = debit. The “C” and “D” are required to be in uppercase.

4.2 Abbreviated terms

Additional abbreviated terms that apply to WIC Online EBT processing have been identified in the WIC Operating Rules.

5 WIC Online EBT message structure

X9.93 Part 1 Messages describes the message structures that may be used in EBT online processing. This section identifies clarifications and restrictions when using the X9.93 Part 1 Messages structure for WIC Online EBT processing. See Section 7 for the message and transaction types allowed in WIC Online EBT processing.

The following clarifications and restrictions apply to WIC Online EBT message structure:

- a) For WIC Online EBT, bit map(s) are used in the messages and in dataset identifiers. These bit maps must be used and interrogated to determine which data elements and sub-elements are present. WIC EBT developers must not assume fixed message formats or fixed dataset identifier formats with pre-determined data elements.
- b) The version number used for WIC Online EBT messages shall be “1”, identifying the version number as “ISO 8583:1993, X9.93 2008”. This means that WIC EBT messages shall begin with “1200” for the Financial Presentment (purchase) request message, for example.
- c) Data exchanged in messages shall be represented in any of the following manners:
 - 1) ASCII alphanumeric characters

- 2) Unpacked numeric data
- 3) Character representation of binary data (bit maps and any data elements defined as “b” binary)
- d) Message repeats shall not be used in WIC Online EBT processing.

6 WIC Online EBT data elements

The data element definitions, bit map positions, format, and representations in X9.93 Part 1 Messages are used as described in WIC EBT processing except where noted in Table 1 of this document.

6.1 WIC Online EBT data element directory

All data elements and any associated sub-elements identified in Table 1 are listed in numerical order by bit map position.

For constructed data elements which have sub-elements, the sub-elements are identified by their position in the data element. For example, *Processing code* is assigned to bit 3 and the sub-element *Transaction type code* of *Processing code* is assigned to bit 3-1, the first sub-element.

For composite data elements, i.e., those with a dataset bit map, the dataset bit map position within the composite data element is indicated. For example, *WIC Prescription food item* is a composite data element assigned to bit 62 and identified as bit 62-PS. The sub-element *Category code* in *WIC Prescription food item* is identified as dataset bit 62-PS-3, as its presence is indicated in the dataset bit map in position 3.

Table 1 shows the usage of each data element by message type in WIC Online EBT processing. Sub-elements are shaded.

Note: Online messages shall be processed using the bit map provided in the message to determine the data elements present in a message.

The condition codes used in Table 1 are:

- a) “M” (mandatory) signifies that the data element is required in the message.
- b) “ME” (mandatory echo) signifies the contents shall be returned unaltered in a subsequent message.
- c) “C” (conditional) signifies that if the condition identified for the message applies, then the data element shall be present, otherwise its inclusion in a message is optional.
- d) “CE” (conditional echo) signifies the contents shall be returned unaltered in a subsequent message if present in the request message.
- e) If no condition code is present, i.e., the table cell is blank, the data element shall not be used in the message without prior approval of FNS.

Table 1 — WIC Online EBT messages data element requirements, continued

Data Element	Bit	Message used in								Usage notes
		Balance Inquiry 100/110		Purchase or Store & Forward 200/210		Reversal or Void 420/430		Network Mgmt 800/810 or 804/814		
Version number	n/a	M	M	M	M	M	M	M	M	Value is "1" in all messages
Message type identifier (MTI)	n/a	100	110	200	210	420	430	800 804	810 814	Only the mandatory messages from Table 3 are included in this table, See 7.1.
Bit map, primary	n/a	M	M	M	M	M	M	M	M	
Bit map, secondary	1	C	C	C	C	C	C	M		Bits in secondary bit map are only mandatory in 8xx request message types
Primary account number (PAN)	2	M	ME	M	ME	ME	ME			
Processing code	3	M	ME	M	ME	M	M			319700 for balance inquiry; 309700 for purchase balance inquiry and 009700 for purchase or reversal
Transaction type code	3-1	M	ME	M	ME	M	M			31 participant balance inquiry, 30 for purchase balance inquiry, 00 for purchase
Account type code 1	3-2	M	ME	M	ME	M	M			97 for balance inquiry or purchase
Account type code 2	3-3	M	ME	M	ME	M	M			00 for balance inquiry or purchase
Amount, transaction	4			M	ME	ME	ME			Echoed from 200 in 420; echoed from 420 in 430; Includes surcharges, if any, see 11.2.9
Amount, settlement (reconciliation)	5				C					Mandatory if approved; contains settlement amount and is called "Amount, settlement" in WIC EBT Online processing
Date and time, transmission	7	M	M	M	M	M	M	M	ME	In GMT
Systems trace audit number	11	M	ME	M	ME	M	ME	M	ME	
Date and time, local transaction	12	M	ME	M	ME	M	ME	M	ME	

Table 1 — WIC Online EBT messages data element requirements, continued

Data Element	Bit	Message used in								Usage Notes
		Balance Inquiry 100/110		Purchase or Store & Forward 200/210		Reversal or Void 420/430		Network Mgmt 800/810 804/814		
Date, expiration	14	C	CE	C	CE	CE	CE			From the card, mandatory in 100 or 200 if Track 2 data is not sent Echoed in 110 or 210 if provided in 100, 200 Echoed in 420 from 200 if present Echoed in 430 from 420 if present
Date, settlement	15				C		M			Mandatory for 210 if transaction is approved or for a partially approved store & forward
Point of service (POS) data code	22	M	ME	M	ME	M	ME			
Card data input capability	22-1	M	ME	M	ME	M	ME			
Cardholder authentication capability	22-2	M	ME	M	ME	M	ME			
Card capture capability	22-3	M	ME	M	ME	M	ME			
Operating environment	22-4	M	ME	M	ME	M	ME			
Cardholder present	22-5	M	ME	M	ME	M	ME			
Card present	22-6	M	ME	M	ME	M	ME			
Card data input mode	22-7	M	ME	M	ME	M	ME			
Cardholder authentication method	22-8	M	ME	M	ME	M	ME			
Cardholder authentication entity	22-9	M	ME	M	ME	M	ME			
Card data output capability	22-10	M	ME	M	ME	M	ME			
Terminal output capability	22-11	M	ME	M	ME	M	ME			
PIN capture capability	22-12	M	ME	M	ME	M	ME			

Table 1 — WIC Online EBT messages data element requirements, continued

Data Element	Bit	Message used in								Usage Notes
		Balance Inquiry 100/110		Purchase or Store & Forward 200/210		Reversal or Void 420/430		Network Mgmt 800/810 804/814		
Function code	24	M		M		M		M	ME	"108" or "160" in balance inquiry; "200" in purchase; "203" or "208" in store and forward, "400" in reversals; "801", "802", "811", or "831" in network management
Message reason code	25					M				Not mandatory in store and forward or network management messages as shown in X9.93: see A.5 for values.
Merchant category code	26	M		M		ME				
Amounts, original	30					M				
Original amount, transaction	30-1					M				
Original amount, reconciliation	30-2					M				
Acquiring institution identification code	32	M	ME	M	ME	M				In 420 reversal advice, may be different than 200 request when 420 is generated by a different party
Forwarding institution identification code	33	C	CE	C	CE	C	CE			Mandatory when not the same as originating institution.
Track 2 data	35	C	CE	C	CE	CE	CE			Mandatory if track data was read at the POS in 100/200 Echoed in 420 if present in request
Retrieval reference number	37	M	ME	M	ME	M	ME			
Retrieval reference number julian date	37-1	M	ME	M	ME	M	ME			WIC Online EBT does not use the sub-elements of retrieval reference number as specified in X9.93
Retrieval reference number terminal sequence number	37-2	M	ME	M	ME	M	ME			WIC Online EBT does not use the sub-elements of retrieval reference number as specified in X9.93

Table 1 — WIC Online EBT messages data element requirements, continued

Data Element	Bit	Message used in								Usage Notes
		Balance Inquiry 100/110		Purchase or Store & Forward 200/210		Reversal or Void 420/430		Network Mgmt 800/810 804/814		
Approval code	38		C		C	CE				Mandatory if accepted/approved Mandatory echo from 210 in 420, if 210 received, or if a void
Action code	39		M		M		M		M	
Card acceptor terminal identification	41	M	ME	M	ME	ME				
Card acceptor identification code	42	M	ME	M	ME	ME				
Card acceptor name/location	43	M	ME	M	ME	ME				
Card acceptor name/street/city	43-1	M	ME	M	ME	ME				
Card acceptor postal code	43-2	M	ME	M	ME	ME				
Card acceptor region	43-3	M	ME	M	ME	ME				
Card acceptor country code	43-4	M	ME	M	ME	ME				
Additional response data	44		C		C		C			Mandatory if action code is "307" – format error; See 7.1.3 and X9.93 Section on Error processing.
Referral phone number	44-1									WIC Online EBT does not use the sub-elements of additional response data
Additional response data, additional data	44-2									WIC Online EBT does not use the sub-elements of additional response data
Additional data, private	48	M	ME	M	ME	ME	ME			
Additional data dataset identifier	48-1	M	ME	M	ME	ME	ME			
Additional data data length	48-2	M	ME	M	ME	ME	ME			
Additional data information	48-3	M	ME	M	ME	ME	ME			

Table 1 — WIC Online EBT messages data element requirements, continued

Data Element	Bit	Message used in								Usage Notes
		Balance Inquiry 100/110		Purchase or Store & Forward 200/210		Reversal or Void 420/430		Network Mgmt 800/810 804/814		
Benefit issuing entity (WIC authority ID)	48-IS									Not used in WIC EBT messages
FNS number	48-EB									Not used in WIC EBT messages
Voucher number	48-VN									
WIC merchant ID	48-WN	M	ME	M	ME	ME	ME			
Currency code, transaction	49			M	ME	ME	ME			Always "840" = USD
Personal identification number (PIN) data	52	M		C						DES3 encryption is minimum required method; end to end encryption may be used if utilized by the WIC Vendor and their Acquirer.
Amounts, additional	54			C	CE	CE	CE			Mandatory if coupon/discount amounts are present in 200 Mandatory, echoed in 400 if present in 200 Mandatory, echoed in 430 if present in 420
Account type, amounts additional	54-1			C	CE	CE				
Amount type, amounts additional	54-2			C	CE	CE				Representation is "an 2" not "n 2" as shown in X9.93 Part 1 Messages
Currency code, amounts additional	54-3			C	CE	CE				Always ""840" = USD
Amount, amounts additional	54-4			C	CE	CE				Contains the total discount amount for the indicated Amount type in the format of "x + n12" where "x" = "C" for credit" or "D" for debit; see 8.3.2.
Original data elements	56					M	ME			
Original message type	56-1					M	ME			
Original systems trace audit number	56-2					M	ME			
Original date and time, local transaction	56-3					M	ME			

Table 1 — WIC Online EBT messages data element requirements, continued

Data Element	Bit	Message used in								Usage Notes
		Balance Inquiry 100/110		Purchase or Store & Forward 200/210		Reversal or Void 420/430		Network Mgmt 800/810 804/814		
Original acquiring institution identification code	56-4					M	ME			
Transport data	59	C		C		C	C	CE	Mandatory in 110, 210 , 430 and 8xx responses if additional information to be provided in the response	
EBT data	60	C	C	C					Contains overflow data from bit 61	
EBT data	61	C	C	C					Contains overflow data from bit 62	
EBT data	62	C	M	C	C				For 110, contains balance information (EA) and earliest benefit expiration date (EF) For 200, contains food items purchased (PS) For 210, If approved purchase, contains rejected or partially approved (NTE adjusted) WIC prescription food items only (PS), balance information (EA) and earliest benefit expiration date (EF) For 210, Store and forward if approved purchase, contains rejected or partially approved (NTE adjustments only) WIC prescription food items only (PS), and (EA) and (EF) information A reversal advice (420) message is recommended to contain <i>EBT data</i> (bit 62) from the original financial presentment transaction (200 or 210) messages if available	
EBT data dataset identifier	62-1	C	M	C	C				Mandatory if transaction is accepted/approved	
EBT data data length	62-2	C	M	C	C				Mandatory if transaction is accepted/approved	
EBT data information	62-3	C	M	C	C				Mandatory if transaction is accepted/approved; contains the data indicated by the dataset identifier value	

Table 1 — WIC Online EBT messages data element requirements, continued

Data Element	Bit	Message used in								Usage Notes
		Balance Inquiry 100/110	Purchase or Store & Forward 200/210	Reversal or Void 420/430	Network Mgmt 800/810 804/814					
EBT balance information	62-EA		C	C						Mandatory if transaction is accepted/approved
EBT balance information bit map	n/a		C	C						Mandatory if transaction is approved ; dataset bit map value is "1420" (0001010000100000)
Continuation bit	62-EA-1									
UPC/PLU data	62-EA-2									
UPC/PLU indicator	62-EA-2-1									
Universal Product Code (UPC)	62-EA-2-2									
Price look-up (PLU)	62-EA-2-2									
UPC/PLU check digit	62-EA-2-3									
Item description	62-EA-3									
Category code	62-EA-4		C	C						Mandatory if transaction is accepted/approved
Category description	62-EA-5									
Sub-Category code	62-EA-6		C	C						Mandatory if transaction is accepted/approved
Sub-Category description	62-EA-7									
Unit of measure	62-EA-8									See A.8
Package size	62-EA-9									
Reserved	62-EA-10									Reserved bit for future use
Benefit quantity	62-EA-11		C	C						Mandatory if transaction is accepted/approved
Benefit unit description	62-EA-12									

Table 1 — WIC Online EBT messages data element requirements, continued

Data Element	Bit	Message used in								Usage Notes
		Balance Inquiry 100/110	Purchase or Store & Forward 200/210	Reversal or Void 420/430	Network Mgmt 800/810 804/814					
UPC/PLU data length	62-EA-13									
Reserved	62-EA-14 through 16									Reserved bits for future use
Earliest benefit expiration date	62-EF	C	C							Mandatory if transaction is accepted/approved; date formatted as CCYYMMDD overall length is 13 positions, see 6.2.3
Earliest benefit expiration date dataset identifier	62-EF-1	C	C							Mandatory if transaction is accepted/approved; see 6.2.3
Earliest benefit expiration date data length	62-EF-2	C	C							Mandatory if transaction is accepted/approved; length of Earliest benefit expiration date information, n 3, value = "008", see 6.2.3
Earliest benefit expiration date information	62-EF-3	C	C							Mandatory if transaction is accepted/approved; In CCYYMMDD format, in GMT
WIC prescription food item	62-PS		M	M						
WIC prescription food item bit map	n/a		M	M						200 is hex "4620", submitted as 2 bytes of binary data (0100011000100000) 210 value varies depending on data returned.
Continuation bit	62-PS-1									
UPC/PLU data	62-PS-2		M	M						
UPC/PLU indicator	62-PS-2-1		M	M						
Universal Product Code (UPC)	62-PS-2-2		C	C						Mandatory if UPC/PLU indicator = "0", right justified, zero-filled
Price look-up (PLU)	62-PS-2-2		C	C						Mandatory if UPC/PLU indicator = "1", right justified, zero-filled

Table 1 — WIC Online EBT messages data element requirements, continued

Data Element	Bit	Message used in								Usage Notes
		Balance Inquiry 100/110		Purchase or Store & Forward 200/210		Reversal or Void 420/430		Network Mgmt 800/810 804/814		
UPC/PLU check digit	62-PS-2-3			M	M					Included in UPC/PLU data length; last position of UPC/PLU data
Category code	62-PS-3									
Sub-Category code	62-PS-4									
Units	62-PS-5									
Item price	62-PS-6			M	M					In 200 is the shelf price; in 210 the approved price; for CVB items value is \$1.00 or 100 pennies (000100); format is 9(4)v99
Purchase quantity	62-PS-7			M	M					In 200 requested quantity, in 210 the approved quantity; for CVB it is the price of the item purchased in pennies
Item action code	62-PS-8				M					New values added see A.3
Original item price	62-PS-9				C					Mandatory if item price differs from original item price in 200 request; format is 9(4)v99; for CVB items value is \$1.00 or 100 pennies (000100)
Original purchase quantity	62-PS-10				C					Mandatory if purchase quantity differs from original purchase quantity in 200 request
UPC/PLU data length	62-PS-11			M	M					Length value includes the check digit as a significant digit, e.g., 12 digits for UPC-A, 6 digits for 5-digit PLU and check digit, 5 digits for 4-digit PLU and check digit.
Reserved	62-PS-12 through 16									Reserved bits for future use
Transaction destination institution identification code	93							M	ME	

Table 1 — WIC Online EBT messages data element requirements, continued

Data Element	Bit	Message used in								Usage Notes
		Balance Inquiry 100/110		Purchase or Store & Forward 200/210		Reversal or Void 420/430		Network Mgmt 800/810 804/814		
Transaction originator institution identification code	94							M	ME	
Key management data	96							C	C	Mandatory when function code = "811"; see 6.2.6.

6.2 WIC Online EBT data element rules

The following sections explain additional data element rules used in WIC Online EBT processing.

6.2.1 Date and time, transaction (bit 12)

The data and time in the purchase transaction (200/210 messages) is provided by the POS. It is recalculated by the EBT Card Issuer processor host system for time zone corrections to determine the appropriate benefit period for the transaction and in dispute resolution. The original data shall not be altered.

6.2.2 UPC/PLU data (bit 62-2)

For WIC EBT, a check digit is required for UPCs and PLUs. The UPC or PLU is right justified in the UPC/PLU data field before calculating the check digit. The *UPC/PLU* data data element is 17 digits. The first sub-element is the *UPC/PLU* indicator (62-2-1). The second sub-element is the *UPC/PLU* (62-2-2). The third sub-element is the *UPC/PLU check digit* (62-2-3) and is in the last position of *UPC/PLU data* data element. It is calculated using the UPC-A check digit algorithm from GS1.

6.2.2.1 Check Digit Calculation

In the UPC-A system, the check digit is calculated as follows:

- a) Add the digits in the odd-numbered positions (first, third, fifth, etc.) together and multiply by three.
- b) Add the digits in the even-numbered positions (second, fourth, sixth, etc.) to the result.
- c) Divide the results by 10.
- d) The check digit is the number which when added to the remainder equals to 10. If there is no remainder then the check digit equals zero.

For example, a UPC-A barcode (in this case, a UPC for a can of tuna) "01111088808X" where X is the check digit, X can be calculated by adding the odd-numbered digits (0+1+1+8+8+8 = 26), multiplying by three (26 × 3 = 78), adding the even-numbered digits (78+0+1+1+0+8+0 = 88), dividing by 10 (88 divided by 10 = 8 with 8 remainder), subtracting the remainder from ten (10 - 8 = 2) and making the check digit 2.

6.2.3 EBT balance information (dataset identifier “EA”)

In the Balance Inquiry response (110) message and the Financial Presentment response (210) message, EBT balance information (bit 62-EA) is returned for approved transactions to provide the balance of the WIC Cardholder’s prescription. Table 2 shows the use of this data element and related sub-elements in WIC Online EBT processing. Note that the “EA” dataset identifier is not to be used in bit 48 and that the dataset bit 10 is reserved.

Table 2 — EBT balance information (dataset identifier “EA”)

Bit	62	Dataset identifier	EA	EBT balance information		
Dataset bit		Name	110	210	Representation	Notes
1		Continuation bit			b	
2		UPC/PLU data			n 17	
		UPC/PLU indicator			n 1	0 = UPC, 1 = PLU
		UPC/PLU			n 15	Right justified, zero-filled
		UPC/PLU check digit			n 1	
3		Item description			ans 50	
4		Category code	C	C	n 2	Mandatory if balance inquiry (x110) or financial presentment (x210) indicates approved
5		Category code description			ans 50	
6		Sub-Category code	C	C	n 3	Mandatory if balance inquiry (x110) or financial presentment (x210) indicates approved
7		Sub-Category code description			ans 50	
8		Unit of measure			an 10	See A.8
9		Package size			n 5	
10		Reserved				
11		Benefit quantity	C	C	n 5	Mandatory if balance inquiry (x110) or financial presentment (x210) indicates approved
12		Benefit unit description			ans 50	
13		UPC/PLU data length			n 2	Include UPC/PLU check digit
14-16		Reserved				

6.2.4 Earliest benefit expiration date (dataset identifier “EF”)

The format of the *Earliest benefit expiration date* data element was not described in X9.93 Part 1 Messages. In the Balance Inquiry response (110) message and the Financial Presentment response (210) message, the data element, *Earliest benefit expiration date* (bit 62-EA) is returned to be printed on the receipt. It is a fixed length composite data element made up of three sub-elements with an overall length of 13 positions and a length indicator of 3 digits. The first sub-element is the dataset identifier. The next sub-element is the length of the benefit expiration date and the third sub-element is the date in the format “CCYYMMDD”. The sub-elements are shown below:

- a) *Earliest benefit expiration date dataset identifier*, n 2, positions 1-2;
- b) *Earliest benefit expiration date length*, n 3, positions 3-5;
- c) *Earliest benefit expiration date information*, n 8, positions 6-13, format "CCYYMMDD".

For example if the earliest benefit expiration date was April 15, 2010, *Earliest benefit expiration date* would have a value of "13EF00820100415". Note that this dataset identifier shall only be used in bit 62 or 60, 61, see 6.2.5.

6.2.5 EBT Data (dataset identifier "PS") additional requirements

Transactions may be split into multiple Financial Presentment request messages to accommodate message size restrictions in bits 60, 61 and 62 for EBT data using the PS dataset identifier. If a transaction is split into multiple messages because the data exceeds the capacity of bits 60, 61 and 62, each message shall be identified uniquely, i.e., shall be assigned its own systems trace audit number.

6.2.6 Key management data (bit 96)

X9.93 Part 1 Messages does not provide specific processing for key management data. For WIC Online EBT, the following rules apply.

- a) The *Key management data* data element shall be used to exchange keys.
- b) The key shall be formatted using 3DES, double-length.
- c) The network management messages shall be used to exchange key change requests and responses.
- d) If the key master is the originator of the network management request message, the *Key management data* data element (bit 96) shall contain the new working key. If the originator of the network management request message is not the key master, then the message is a request for the key to be changed and the new key shall be sent in the response.

7 WIC Online EBT messages and transactions

X9.93 Part 1 Messages describes messages that are sent between Acquirers and Card Issuers. The messages are grouped into message classes, i.e., authorization, verification, financial presentment, file actions, reversal, administrative and network management.

Within each message class there are request, response, advice, advice response, and notification message types.

Each message class uses pairs of message types to describe a type of transaction, i.e., balance inquiry, purchase, void, etc.

7.1 Mandatory WIC Online EBT transaction types

Only some of the message types described in X9.93 Part 1 Messages are mandatory in WIC Online EBT. The file action and administrative message classes may be used in WIC Online EBT, but are considered optional as shown in Table 3.

Other message types (e.g., 220/230) may be used for closed loop EBT card acceptance devices (CADs) that are connected to an Acquirer. The format and use of these other message types are not addressed in this Technical Implementation Guide.

Table 3 — WIC Online EBT mandatory and optional transaction set

Transaction type	Mandatory message types								Optional message types		
	100	110	200	210	420	430	800/804	810/814	304	314	644
Balance Inquiry	x	x									
Purchase			x	x							
Store and forward			x	x							
Partial approvals			x	x							
Manually key-entered transaction			x	x							
Reversals					x	x					
Void					x	x					
Network management							x	x			
UPC/PLU file updates									x	x	
Error message notification											x

7.1.1 Message flows

WIC Online EBT follows the message flows described in X9.93 Part 1 Messages except where otherwise noted in the Message class descriptions in Section 8.

7.1.2 Exception message flows

X9.93 Part 1 Messages defines the use of reversals for late response and time out situations. In WIC Online EBT, only the reversal on late response, as described in Clause 7.1.4.2 of the X9.93 Part 1 Messages standard is required between the Acquirer, or their agent, and the Card Issuer, or their agent. See Section 8.5 for details of reversal messages.

7.1.3 Message errors

Clauses 7.1.3 and 8.6 in X9.93 Part 1 Messages describe the message error processing that is used in WIC Online EBT. In addition, WIC EBT requires that *transport data* (bit 59) be returned in a response message if additional information is provided on the error.

The *message error indicator* (bit 18) may be used in the response or advice response message types to provide specific information regarding an error in a particular data element, sub-element, or dataset identifier, however, support for this use shall not be required.

7.2 WIC online EBT Transaction processing

In X9.93 Part 1 Messages, “Offline processing” and “Online Processing” are described. In WIC EBT the terms are used differently. “Online processing” in WIC EBT refers to transactions completed using the exchange of real-time messages between the Acquirer and Card Issuer that are initiated with a payment card containing a magnetic stripe. “Offline processing” refers to transactions completed using a payment card containing an integrated circuit chip (smart card) in the CAD at the POS. To avoid confusion, this document uses the terms “WIC Online EBT” when referring to online processing and “WIC Smart Card EBT” when referring to offline processing.

8 WIC Online EBT message classes

This section describes how the different message classes i.e., authorization, verification, financial presentment, file actions, reversal, administrative and network management message, are used in WIC Online EBT processing.

8.1 Authorization message class

The Authorization message class is not used as defined in X9.93 Part 1 Messages in WIC Online EBT. Transactions are not pre-authorized and a subsequent advice submitted for payment. Instead, the Balance Inquiry Verification request and response message types (100/110) may be used to obtain a balance prior to initiating a Financial Presentment message.

8.2 Verification message class

WIC Online EBT uses the verification message class for balance inquiry transactions. The PIN verification and Purchase initiation (pre-authorizations) verification message types are not used.

Table 4 lists the mandatory and conditional data elements used in WIC Verification messages. See Table 1 for details of usage of the data elements shown.

Table 4 — Verification messages mandatory and conditional data elements

Bit	Verification messages	Message type identifiers	
		100	110
	Data element name		
n/a	message type ID	M	M
n/a	Bit map, primary	M	M
1	Bit map, secondary	C	C
2	Primary account number	M	ME
3	Processing code	M	ME
7	Date and time transmission	M	M
11	Systems trace audit number	M	ME
12	Date and time, local transaction	M	ME
14	Date, expiration	C	CE
22	Point of service data code	M	ME
23	Card sequence number	C	
24	Function code	M	
26	Merchant category code	M	
32	Acquiring institution identification code	M	ME

Bit	Verification messages	Message type identifiers	
		100	110
	Data element name		
33	Forwarding institution identification code	C	CE
35	Track 2 data	C	CE
37	Retrieval reference number	M	ME
38	Approval code		C
39	Action code		M
41	Card acceptor terminal identification	M	ME
42	Card acceptor identification code	M	ME
43	Card acceptor name and location	M	ME
44	Additional response data		C
48	Additional data, private	M	M
52	PIN data	M	
59	Transport data		C
60	EBT data		C
61	EBT data		C
62	EBT data		C
62-1	EBT data dataset identifier		C
62-2	EBT data data length		C
62-3	EBT data information		C
62-EA	EBT balance information		C
62-EA-1	EBT balance information bit map		C
62-EA-4	Category code		C
62-EA-6	Sub-Category code		C
62-EA-11	Benefit quantity		C
62-EF	Earliest benefit expiration date		C
62-EF-1	Earliest benefit expiration date dataset identifier		C
62-EF-2	Earliest benefit expiration date data length		C
62-EF-3	Earliest benefit expiration data information		C

The following sections provide additional clarifications and describe differences from the X9.93 Part 1 Messages requirements for the verification message class.

8.2.1 Verification message processing codes

Only the following processing codes are used in WIC Online EBT for balance inquiries using the Verification messages:

- a) 309700 WIC available benefits inquiry – used at the POS to obtain benefit balance prior to sending a Purchase request.
- b) 319700 WIC benefit balance inquiry – used when a balance inquiry is requested by the WIC Cardholder separately from a purchase.

8.3 Financial Presentment message class

The Financial Presentment message class is used in WIC Online EBT for purchases, store and forward, partial approvals and manually key-entered transactions. Only the Financial Presentment request and Financial Presentment response (200/210) message types are used.

Table 5 lists the mandatory and conditional data elements used in WIC Financial Presentment messages. See Table 1 for details of usage.

Table 5 — Financial presentment messages mandatory and conditional data elements

Bit	Financial Presentment messages	Message type identifiers	
		200	210
	Data element name		
	Message type ID	M	M
	Bit map, primary	M	M
1	Bit map, secondary	C	C
2	Primary account number	M	ME
3	Processing code	M	ME
4	Amount transaction	M	ME
5	Amount, reconciliation		C
7	Date and time transmission	M	M
11	Systems trace audit number	M	ME
12	Date and time, local transaction	M	ME
14	Date, expiration	C	CE
15	Date, settlement		C
22	Point of service data code	M	ME
24	Function code	M	
25	Message reason code		
26	Merchant category code	M	
30	Amounts, original		
32	Acquiring institution identification code	M	ME
33	Forwarding institution identification code	C	CE
35	Track 2 data	C	CE
37	Retrieval reference number	M	ME

Bit	Financial Presentment messages	Message type identifiers	
		200	210
	Data element name		
38	approval code		C
39	Action code		M
41	Card acceptor terminal identification	M	ME
42	Card acceptor identification code	M	ME
43	Card acceptor name and location	M	ME
44	Additional response data		C
48	Additional data, private	M	ME
49	Currency code, transaction	M	ME
52	PIN data	C	
54	Amounts, additional	C	CE
60	EBT data	C	C
61	EBT data	C	C
62	EBT data	M	C
62-1	EBT data dataset identifier	M	C
62-2	EBT data data length	M	C
62-3	EBT data information	M	C
62-EA	EBT balance information		C
62-EA	EBT balance information bit map		C
62-EA-4	Category code		C
62-EA-6	Sub-Category code		C
62-EA-11	Benefit quantity		C
62-EF	Earliest benefit expiration date		C
62-EF-1	Earliest benefit expiration date dataset identifier		C
62-EF-2	Earliest benefit expiration date data length		C
62-EF-3	Earliest benefit expiration data information		C
62-PS	WIC prescription food item	M	M
62-PS	WIC prescription food item bit map	M	M
62-PS-2	UPC/PLU data	M	M
62-PS-2-1	UPC/PLU indicator	M	M
62-PS-2-2	Universal product code (UPC)	C	C
62-PS-2-2	Price look-up code (PLU)	C	C
62-PS-2-3	UPC/PLU check digit	M	M
62-PS-6	Item price	M	M
62-PS-7	Purchase quantity	M	M

Bit	Financial Presentment messages	Message type identifiers	
		200	210
	Data element name		
62-PS-8	Item action code		M
62-PS-9	Original item price		C
62-PS-10	Original purchase quantity		C
62-PS-11	UPC/PLU data length	M	M

The following sections provide additional clarifications and differences from the X9.93 Part 1 Messages requirements for the Financial Presentment message class.

8.3.1 Partial approvals

When a Financial Presentment response (210) message is sent, the approved WIC purchase *amount, paid* may be for a lesser amount than requested. The *purchase quantity* shall not be less than requested purchase quantity because the WIC Vendor validates the purchase quantity against the WIC Cardholder's benefit prescription before submitting the Financial Presentment (200) message.

A Purchase transaction may have an *item price* set to less than the original *item price* provided by the WIC Vendor due to NTE (not to exceed) pricing requirements and other cost containment adjustments. Only the partially approved items are returned in the *EBT data* (bit 62) data element of the Financial Presentment response (210) message.

In a store and forward transaction, both the *item price* and the *purchase quantity* may be approved for less than what was requested. The *purchase quantity* may be less than requested because only a portion of the items requested are available in the WIC Participant's benefits. An individual food item may also be rejected in a store and forward transaction because it is not available in the WIC Participant's benefits.

The *amount, discount* in a store and forward response (210) message is not adjusted as the result of a partial approval or NTE.

8.3.2 Discounts and coupon information

X9.93 Part 1 Messages provides for reporting the discount or coupon amount in two ways in the Financial Presentment request (200) and response (210) messages as described below:

- a) The discount amount may be in *Amount, amounts additional* (bit 54-4) of *Amounts, additional* (bit 54) as indicated by the *Amount type* (bit 54-2) when reporting on the discount amount for the entire transaction.
- b) The discount amount may be netted from the *Item price* (bit 62-6) by the WIC Vendor in the WIC Prescription food item (Dataset identifier "PS") data element when reporting on a single, non-CVB food item in the Financial Presentment request (200) message. As netting the discount amount may affect the calculation of the future NTE price for the food item, this option is not recommended for non-CVB food items.

Discounts or coupons are handled in transactions as described below:

- a) There is no separate data element or sub-element in the Financial Presentment request (200) or response (210) messages for the discount amount applied to the item price.
- b) Discounts are calculated at the point in time that WIC payment is initiated. The discount is not recalculated if items or discounts are added to or removed from the order after the WIC payment is finalized.
- c) The *amount, discount* is not adjusted as the result of a partial approval or NTE edit.
- d) Discounts applied to non-CVB WIC items are reported in the WIC auto-reconciliation detail record *amount, discount* data element as a total of the discounts applied to the transaction.
- e) The *amount, transaction* and *amount, paid* are set to zero in the 210 response or 430 advice response messages if the application of any discounts result in a negative amount when calculating these amounts and shall not result in a net credit to the WIC vendor.

See Section 11.2.9 for a description of discount amounts in the WIC Auto-reconciliation file.

8.3.3 Surcharges information

The Operating Rules permit surcharges by commissary and cost plus WIC Vendors provided all customers are surcharged. The following processing rules apply:

- a) Surcharges are to be pro-rated across all WIC items purchased.
- b) Surcharges are included in the *amount, transaction*.
- c) Surcharges may be applied before any coupons or discounts.
- d) The last item on which the surcharge is applied shall be adjusted to make the sum of the item prices times the quantities purchased equal to the *amount, transaction*.
- e) Any CVB items will reflect the application of the surcharge fee on the WIC receipt provided to the WIC cardholder showing the remaining benefit balances.

8.3.4 Store and forward transactions

A store and forward transaction is a purchase that is electronically stored with an encrypted PIN when the POS is unable to communicate with the Card Issuer. The following conditions apply to the processing of store and forward transactions:

- a) A store and forward transaction echoes the original date and time, local transaction which shall not be altered by any party to the transaction. For the purposes of transacting benefits within the benefit period (end date), the transaction date and time is defined as the *date and time, local transaction* (bit 12) from the Financial Presentment (200) request message. The store and forward transaction is authorized based on this date and time.
- b) Store and forward processing may be done by the WIC Vendor as a replacement for manual vouchers that are no longer supported by the WIC Vendor and/or the WIC State Agency.

- c) A store and forward transaction shall be identified by the *function code* (bit 24) values of either “203 – resubmission of a previously denied (i.e., incomplete) financial request” or “208 – final representation full amount”. Only store and forward financial presentments shall be resubmitted.

8.3.5 Declined transactions

A declined transaction shall use the *action code* (bit 39) data element to indicate the reason for the decline. Action code “119” – transaction not permitted for cardholder” is used to indicate that the food item is not permitted for WIC. Action code “116” – insufficient funds” is used to indicate that the prescription benefit balance is insufficient.

The declined items are returned in the *EBT data* (bit 62) data element of the Financial Presentment response (210) message with the *item price* (62-PS-6) and *purchase quantity* (62-PS-7) set to zero and the *original item price* (62-PS-9) and *original purchase quantity* (62-PS-10) from the original request message.

8.4 File action message class

WIC Online EBT implementations may use the File action message class (304/314) for updating the information in the Authorized Product List (APL). Updates to the APL may be for any data in the APL.

Use of the File action messages (either as real-time, online message exchange or in a file format) for UPC/PLU file updates is not required for WIC Online EBT implementations. Table 6 lists the mandatory and conditional data elements used in WIC File action messages.

Table 6 — File action messages mandatory and conditional data elements

Bit	File action messages	Message type identifiers			
		304	314	322	330
	Data element name				
	Message type ID	M	M	M	M
	Bit map, primary	M	M	M	M
1	Bit map, secondary	M	M	M	C
2	Primary account number			C	C
7	Date and time transmission	M	M	M	M
11	Systems trace audit number	M	ME	M	ME
12	Date and time, local transaction	M	ME	M	ME
24	Function code	M	ME	M	ME
25	Message reason code			C	ME
32	Acquiring institution identification code	M	ME	M	
39	Action code		M		M
41	Card acceptor terminal identification	C			
48	Additional data, private	M			
59	Transport data		C		
62	EBT data	M	M		

Bit	File action messages	Message type identifiers			
		Data element name	304	314	322
72	Data record			C	
101	File name	M		M	

The following sections provide additional clarifications and differences from the X9.93 Part 1 Messages requirements for the File action message class.

8.4.1 EBT file update request data (dataset identifier “EC”)

The *EBT file update request data* data element is a constructed data element made up of 2 parts.

- a) *Update GMT start date and time*, n 14. This sub-element is the date and time the EBT file update request is effective, in GMT.
- b) *EBT file update start record*, an...17). This sub-element will contain *either* the Category/Sub-Category of the item to be updated *or* the UPC/PLU data to be updated.

8.4.2 EBT file update response data (dataset identifier “ED”)

The *EBT file update response data* mandatory and conditional sub-elements are shown in Table 7.

Table 7 — EBT file update response data (dataset identifier “ED”)

Bit	62	Dataset identifier		ED	EBT file update response data	
Dataset bit	Name	Representation	Usage with Category/ Sub-Category update		Usage with UPC/PLU update	
1	Continuation bit	b				
2	UPC/PLU data	n 17				
3	Item description	ans 50	Mandatory if item action code = “05”			
4	Category code	n 2	Mandatory if item action code = “05”			
5	Category description	ans 50				
6	Sub-Category code	n 3	Mandatory if item action code = “05”			
7	Sub-Category description	ans 50			Mandatory if item action code = “05”	
8	Unit of measure	an 10	Mandatory if item action code = “05”		Mandatory if item action code = “05”, see A.8 for values	
9	Package size	n 5	Mandatory if item action code = “05”			
10	Benefit quantity	n 5	Mandatory if item action code = “05”			
11	Benefit unit description	ans 50				
12	Item price	n 6	Mandatory if item action code = “05”		Format is 9(4)v99	
13	Price type	an 2	Mandatory if item action code = “05” and weighted product indicator = “1”			
14	Date, effective	n 8	Mandatory if item action code = “05”		If no date is entered, data element is defaulted to File create date i.e., UPC/PLU is effective upon receipt	
15	Date, end	n 8	Mandatory if item action code = “05” and item has an associated end date		If no date is entered, data element is zero-filled and authorization continues	

Bit	62	Dataset identifier		E EBT file update response data	
Dataset bit	Name	Representation	Usage with Category/ Sub-Category update		Usage with UPC/PLU update
16	Continuation bit	b			
17	Purchase indicator	n 1	Mandatory if item action code = "05"		
18	Weighted product indicator	n 1	Mandatory if item action code = "05"		
19	Manual voucher indicator	n 1			Mandatory if item is allowable for manual voucher purchases
20	Item action code	n 2	"05" = add/update record "06" = delete record		"05" = add/update record "06" = delete record
21	UPC/PLU data length	n 2			

8.5 Reversal message class

Reversal advice and Reversal advice response (420/430) messages are used in WIC Online EBT.

Table 8 lists the mandatory and conditional data elements used in WIC Reversal messages. See Table 1 for details of usage.

Table 8 — Reversal message mandatory and conditional data elements

Bit	Reversal messages	Message type identifiers	
		420	430
	Data element name		
n/a	Message type ID	M	M
n/a	Bit map, primary	M	M
1	Bit map, secondary	C	C
2	Primary account number	ME	ME
3	Processing code	M	M
4	Amount transaction	ME	ME
7	Date and time transmission	M	M
11	Systems trace audit number	M	ME
12	Date and time, local transaction	M	ME
14	Date, expiration	CE	
15	date settlement		M
22	Point of service data code	M	
23	Card sequence number	C	
24	Function code	M	
25	Message reason code	M	
26	Merchant category code	C	
30	Amounts, original	M	

Bit	Reversal messages	Message type identifiers	
		420	430
32	Acquiring institution identification code	M	
33	Forwarding institution identification code	C	
35	Track 2 data	CE	
37	Retrieval reference number	M	ME
38	Approval code	CE	
39	Action code		M
41	Card acceptor terminal identification	ME	
42	Card acceptor identification code	ME	
43	Card acceptor name and location	ME	
44	Additional response data		C
48	Additional data, private	ME	ME
49	Currency code, transaction	ME	ME
54	Amounts, additional	CE	CE
56	Original data elements	M	ME
59	Transport data		C
62	EBT data	C	

The following sections provide additional clarifications and describe differences from the X9.93 Part 1 Messages requirements for Reversal messages.

8.5.1 Reversal message processing rules

- a) Reversals shall not be used for adjustments.
- b) Reversals shall not be used to affect returns. Returns are not allowed in WIC Online EBT.
- c) Representments shall not be used in WIC Online EBT.
- d) While the POS may generate a reversal on time-out, the Acquirer will determine if it is to be sent to the Issuer based on whether a response to the original request was received at the Acquirer. Thus, only reversals on a late response are used between the Acquirer and Issuer. The Acquirer shall continue to send the Reversal advice (420) message until the Reversal advice response (430) is received.
- e) Table 17 in X9.93 Part 1 Messages describes *Amount, transaction* (bit 4) in Reversal messages for the full amount as containing the “new” transaction amount, i.e. zero. However, in practice, WIC EBT is using the originally requested transaction amount from the Financial Presentment (200) message in *Amount, transaction* (bit 4) in reversal advice (420) messages.

- f) X9.93 Part 1 Messages shows that data element *EBT data* (bit 62) is conditional in reversal messages used to void a transaction. A reversal advice (420) message is recommended to contain *EBT data* (bit 62) from the original financial presentment transaction (200 or 210) message if available.
- g) Reversals shall have a unique *Systems trace audit number* (bit 11) and shall have the *Original systems trace audit number* from the Financial Presentment message (0200) in *Original data elements* (bit 56).
- h) *Message reason code* (bit 25) shall be used to indicate the reason for the reversal, see A.5 for values.

8.6 Administrative message class

Administrative notification (644) messages may be used to notify of an error condition detected by the receiver in a previously submitted message that:

- 1) cannot be parsed by the receiver or
- 2) which contains a message type that is not recognized by the receiver.

It is recommended that Administrative notifications be supported in WIC Online EBT implementations.

Table 9 lists the mandatory and conditional data elements used in WIC Administrative notification messages as specified in Clause 8.6 of X9.93 Part 1 Messages.

Table 9 — Administrative message mandatory and conditional data elements

Bit	Error messages	MTI
	Data element name	644
	Message type ID	M
	Bit map, primary	M
1	Bit map, secondary	C
7	Date and time transmission	M
11	Systems trace audit number	M
12	Date and time, local transaction	M
24	Function code	M
33	Forwarding institution identification code	C
72	Data record	M
93	Transaction destination institution identification code	M
94	Transaction originator institution identification code	M
100	Receiving institution identification code	C

8.7 Network management message class

Network management messages, the 800/810 or 804/814 message pair, shall be supported in WIC Online EBT interfaces between processors, Acquirers and Card Issuers. WIC Vendors shall support this message class if directly connected to the Card Issuer or their processor.

Table 10 lists the mandatory and conditional data elements used in WIC Verification messages. See Table 1 for details of usage.

Table 10 — Network management messages mandatory and conditional data elements

Bit	Network management messages	Message type identifiers	
		800/804	810/814
	Data element name		
n/a	Message type ID	M	M
n/a	Bit map, primary	M	M
1	Bit map, secondary	M	M
7	Date and time transmission	M	M
11	Systems trace audit number	M	ME
12	Date and time, local transaction	M	ME
24	Function code	M	ME
39	Action code		M
59	Transport data	C	CE
93	Transaction destination institution identification code	M	ME
94	Transaction originator institution identification code	M	ME
96	Key management data	C	C

9 WIC Smart Card EBT message processing

WIC Smart Card EBT uses messages between the smart card and the card reader in the Card Acceptance Device (CAD) to complete transactions at the POS. Current implementations use jointly developed, common messaging formats that have been certified with a number of commercial electronic cash register systems. The ANS X9.108 DSTU *Financial transaction message – Electronic benefits transfer (EBT) – WIC retailer interface standard*, when finalized as a standard, will define the message formats for WIC Smart Card EBT processing. Any clarifications or processing considerations identified when the standard is implemented will be added to this document.

10 WIC Online and Smart Card EBT Files

WIC Online and Smart Card EBT use some of the file formats defined in X9.93 Part 2 Files. This section provides clarifications and describes differences in WIC EBT processing from the X9.93 Part 2 Files requirements.

10.1 File structure

Clause 5 of X9.93 Part 2 Files describes the structure of files used in WIC Online and Smart Card EBT. Files contain records that are constructed of data elements. Clause 6 of X9.93 Part 2 Files defines the data elements, Clause 7 defines the records and Clause 8 the files.

An aggregate file is used to combine files of the same type to reduce transmission volume and times. Transaction-only files are used to combine transactions from multiple locations into a single file.

This section of the Technical Implementation Guide describes additional processing considerations for WIC Online and Smart Card EBT files.

10.1.1 File names

X9.93 Part 2 Files defines several different kinds of files using the *file name* data element within a file. WIC EBT uses the following *file name* values shown below:

- a) ACKNOWLEDGMENT FILE
- b) AGGREGATE AUTO-RECON FILE
- c) AGGREGATE CLAIM FILE
- d) AUTO-RECONCILIATION FILE
- e) HOTLIST REPLACEMENT FILE
- f) TXNS-ONLY CLAIM FILE
- g) TXNS-ONLY AUTO-RECON FILE
- h) UPC/PLU STORE FILE
- i) WIC CLAIM FILE
- j) WIC STATE BENEFIT FILE

10.1.2 Transmission files

In addition to the *file name* data element in file records, files transmitted between the WIC Vendor and the WIC State Agency are identified by a File envelope name. Following are the requirements for File envelope naming:

- a) The File envelope name shall be a standard 8.3 composition with a maximum of eight characters, followed by a period, followed by a three character file extension, e.g., XXXXXXXX.XXX.
- b) The File envelope name shall conform to the File envelope naming conventions in Section 10.1.3.
- c) Base 36 values shall be used to identify the File envelope name values. See Table 11 for a table converting Decimal numeric values to Base 36 alphanumeric values. To convert larger decimal (Base 10) values to Base 36, conversion tools are available at <http://www.unitconversion.org>.

Table 11 — Base 36 conversion

Decimal	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Base 36	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	G	H
Decimal	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Base 36	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

10.1.3 File envelope naming conventions

File envelope names shall follow the naming conventions defined in this section. File envelope names are defined using the File envelope coding values shown in Table 12, where “t” indicates a Base 36 format.

Table 12 — File envelope naming

Coding Value	Name	Description	Format
AAA	Extraction tracking ID	A code assigned by the WIC State Agency to identify the extraction file	a 3
FFF	Submission tracking ID	A value assigned by the WIC State Agency to track a file	a 3
FFFF	WIC Vendor ID	A value assigned by the WIC State Agency to uniquely identify the WIC Vendor	a 4
FFFFFFF	Auto-reconciliation File envelope name	First 8 characters of the associated WIC State agency Card Acceptor claim file	a 8
HH	Hour of day	Two digit value representing the hour of the day, 00-24	n 2
M	Compression code	A code identifying the data compression method used for files as defined by the WIC State Agency	an 1

Coding Value	Name	Description	Format
MDYY	File envelope date	Calendar month and day as base-36 values (January = 1, October = A; 2 nd = 2, 12 th = C) and last 2 digits of the calendar year	MDYY, tn 4
MM	Minutes of hour	Two digit value representing the minutes of the hour, 00-59	n 2
NNNNNNNN	Original File envelope name	First 8 characters of the referenced submission or extraction file	an 8
see A.7 for values	File envelope identifier code	A static value in the File envelope name extension indicating an attribute of the file	a1
XX	Suffix value	A value in the File envelope name extension used to uniquely identify the file for any julian date in the Base 36 range of "00" to "ZZ". Unique for each file derived from the identified forwarding institution's submission for the day.	t 2
YJJJ	File envelope julian date	Year and julian date from the original extraction file	t 4

Using the File envelope naming conventions, the File envelope names defined are:

- a) MFFFMDYY.TXX (Claim submission file) A file submitted in the compression format indicated by the forwarding institution and containing one or more WIC claim files.
- b) MAAAMDYY.CXX (Extraction file) A file extracted by the WIC State Agency from the compressed WIC claim file in a transaction-only, aggregate or single WIC vendor file layout.
- c) FFFFYJJJ.SXX (Card acceptor claim file) A file created by the WIC State Agency for each Card acceptor in a transaction-only or aggregate extracted file.
- d) NNNNNNNN.?XX (Acknowledgment file) A file created by the WIC State Agency in response to a file received from the forwarding institution where "?" indicates the File envelope identifier code.
- e) FFFFFFFF.AXX (Auto-reconciliation file) A file created by the WIC State Agency to provide reconciliation of the submitted claim files.
- f) MDYYHHMM.XXX (APL or HCL file) A UPC/PLU or Hot Card List file created by the WIC State Agency.

10.1.4 File errors

WIC Online and Smart Card EBT shall use the file error processing described in Section 8.4 in X9.93 Part 2 Files. A list of the *Error identifier code* values is in A.1.

The WIC Acknowledgment file shall contain information on rejected files using the WIC Acknowledgment file rejection detail record ("D7"). Rejected transactions are reported using the WIC Acknowledgment card acceptor detail record ("D8"). A WIC acknowledgment transaction rejection addenda record ("E5") shall be generated for each transaction addenda record error.

10.1.5 File processing rules

Files shall comply with the processing rules defined in this section.

- a) *File create date* and *File create time* shall be less than or equal to the corresponding values in the WIC Claim file super header record and WIC Claim file super trailer record.
- b) *File format version* of the WIC claim file super header record shall equal that of the WIC Claim file super trailer record.

10.1.6 File records

WIC EBT uses the following types of records as defined in X9.93 Part 2 Files. The record name and record identification code(s) are listed.

- a) Super header record (A0)
- b) Header record (A1, A2)
- c) Detail record (D4, D5, D6, D7, D8)
- d) Addenda record (E1, E2, E3, E5)
- e) Trailer record (Z1)
- f) Super trailer record (Z2)

10.1.7 Record formatting

For consistency and ease of processing, each record created for a file shall comply with the following formatting:

- a) Each record shall be made to be the same length by padding the end of the record.
- b) Filler characters used to pad the end of a record shall be character spaces.
- c) Each record in a file shall be terminated with a carriage return character and a line feed character.
- d) Each record shall be padded out to the longest record length present in the file.

10.2 WIC EBT Files data element directory

Clause 6 of X9.93 Part 2 Files describes the data elements used in the standard. Table 13 provides a complete list in alphabetical order of the data elements used in WIC EBT files. Table 13 also identifies in which files (Claim, Auto-reconciliation, UPC/PLU, or Hot Card List) and in which records (identified by record identification code) the data elements are used.

Default values for data elements in records, unless otherwise specified, shall correspond to the data element format, i.e., numeric data elements, as indicated by a format of “n x” where “x” is the number of digits, are defaulted to zeroes) and alphanumeric data elements, as indicated by a format of “an x” where “x” is the number of characters are defaulted to spaces. Additional requirements and clarification for use in WIC EBT processing is shown in the Notes column.

Table 13 — Files data element directory

Data element name	File and record used in (as identified by record identification code)						Notes
	Claim	Auto Recon	UPC/PLU	Hot Card	ACK	SB	
Actual value, data element					E5		
Acquiring institution identification code	A0 A1 D4	A1 E1				A1 D4	
Addenda sequence number	E3	E1 E2			E5	E4	
Adjustment memo		D5					
Amount, adjustment		D5					May be either a Debit or Credit amount and is not necessarily tied to a single transaction
Amount, card acceptor claimed					D8		
Amount, card acceptor claimed total					Z1		
Amount, card acceptor accepted transactions					D8		
Amount, card acceptor accepted transactions total					Z1		

Table 13 — Files data element directory, continued

Data element name	File and record used in (as identified by record identification code)						Notes
	Claim	Auto Recon	UPC/ PLU	Hot Card	ACK	SB	
Amount, card acceptor rejected transactions					D8		
Amount, card acceptor rejected transactions total					Z1		
Amount, claim price total	Z2						Sum amount of the Claim price in WIC claim addenda records
Amount, claimed		E2					The (final) price of the item, calculated by multiplying the item price times the number of units including any surcharge, see 11.2.9
Amount, claimed total	Z1 Z2				Z1		Sum amount of the Amount, transaction in all WIC claim detail records
Amount, discount	D4	D4					The amounts deducted from the gross amount of the original transaction due to coupons or other reductions in the amount., see 11.2.9
Amount, discount total	Z1 Z2	Z1					The absolute value of the sum of all discounts, see 11.2.9
Amount, item discount		E2					Zero-filled if not available
Amount, paid		D4 E2					Amount, transaction less amount, discount and any changes for NTE or other corrections by the WIC State Agency, see 11.2.9
Amount, transaction	D4	D4					Funds requested by the cardholder in the local currency of the acquirer or source location of the transaction including surcharges, if any, see 11.2.9
Approval code		E1					
Benefit issuing entity	D4					D4	

Table 13 — Files data element directory, continued

Data element name	File and record used in (as identified by record identification code)						Notes
	Claim	Auto Recon	UPC/ PLU	Hot Card	ACK	SB	
Benefit quantity			D4				The amount of the specified item to be deducted from the WIC Participant's prescription benefit when redeemed.
Benefit unit description			D4 D6				A text description of the specified benefit issuance unit of measure; recommend limiting to 6 digits for receipt use
Card acceptor additional description data	D4						
Card acceptor identification code	D4	E1	D4		D7 D8 E5		
Card acceptor name/ location	D4						
Card acceptor name\street\city	D4						
Card acceptor postal code	D4						
Card acceptor region	D4						
Card acceptor country code	D4						
Card acceptor terminal identification	D4	E1					
Card issuer reference data		E1					
Category code	E3	E2	D4 D6			E4	
Category description			D4 D6				
Claim file reference ID					A2		
Claim file reference ID accepted					D8		
Claim price	E3						

Table 13 — Files data element directory, continued

Data element name	File and record used in (as identified by record identification code)						Notes
	Claim	Auto Recon	UPC/ PLU	Hot Card	ACK	SB	
Count, accepted records					Z1		
Count, adds			Z1				
Count, card acceptor detail records					Z1		
Count, card acceptor transactions					D8		
Count, card acceptor rejected transactions					D8		
Count, changes			Z1				
Count, claims in file	Z2						The number of WIC Claim file header records in an aggregate WIC claim file or the number of unique Card acceptor identification codes in a transactions-only WIC claim file
Count, deletes			Z1				
Count, detail records	Z1 Z2	Z1 Z2	Z1	Z1	Z1	Z1	
Count, forwarded files					Z1		
Count, hot cards				Z1			
Count, items	D4					D4	
Counts, rejected records					Z1		
Count, replacements			Z1				
Date and time, effective				D4			CCYYMMDDhhmmss In GMT
Date and time, local transaction	D4	D4				D4	

Table 13 — Files data element directory, continued

Data element name	File and record used in (as identified by record identification code)						Notes
	Claim	Auto Recon	UPC/PLU	Hot Card	ACK	SB	
Date and time, transmission	D4	D4				D4	MMDDhhmmss, in GMT Note: different from format shown in X9.92 Part 2 Files; changed to delete year and add seconds to align with X9.93 Part 1 Messages
Date, claim	A0 A1 Z1						Local date
Date, claim file	Z2						Local date
Date, effective			D4				CCYYMMDD In GMT, see 10.3.3; If no date is entered, data element is defaulted to File create date i.e., UPC/PLU is effective upon receipt.
Data element name					E5		
Date, end			D4			D4	CCYYMMDD In GMT, see 10.3.3; If no date is entered, data element is zero-filled and authorization continues
Date, settlement		A1 Z1					In GMT
Error descriptor					D7 E5		
Error detail					D7 E5		
Error identifier code					D7 E5		See A.1
Error record sequence number					E5		
Error source					D7 E5		

Table 13 — Files data element directory, continued

Data element name	File and record used in (as identified by record identification code)						Notes
	Claim	Auto Recon	UPC/ PLU	Hot Card	ACK	SB	
Expected value, data element					E5		
File create date	A0 A1 Z1 Z2	A0 A1 Z1 Z2	A1 Z1	A1 Z1	A2 Z1	A1 Z1	In GMT
File create time	A0 A1 Z1 Z2	A0 A1 Z1 Z2	A1 Z1	A1 Z1	A2 Z1	A1 Z1	In GMT
File format version	A0 A1 Z1 Z2	A0 A1 Z1 Z2	A1 Z1	A1 Z1	A2 Z1	A1 Z1	Value in all records = "04"
File name	A0 A1	A0 A1	A1	A1	A2	A1	
File process date					A2		
File process time					A2		
File rejection error count					A2		
File sequence number	A0 A1	A0 A1	A1	A1	A2	A1	
File status code					A2		
File submission date					A2		
File submission time					A2		
File type	A0 A1	A0 A1	A1	A1	A2	A1	
First date to spend	D4					D4	From card

Table 13 — Files data element directory, continued

Data element name	File and record used in (as identified by record identification code)						Notes
	Claim	Auto Recon	UPC/ PLU	Hot Card	ACK	SB	
Forwarding institution identification code	A0 A1	A0 A1	A1	A1	A2	A1	
GMT offset	D4	D4					See 11.2.3, format is "n 4"
Integrated circuit card (ICC) result code	D4						This is a tag in the ICC system related data data field. See A.2 for values.
Integrated circuit card (ICC) system related data	D4						
Item description			D4				
Item price			D4				Format is 9(4)v99
Manual voucher indicator			D4				See 10.3.2 and A.2
Message reason code		D4 E2 D5		D4			
Message type	D4	D4 D5	D4 D6	D4	D7 D8 E5	D4	
Original addenda sequence number		E2					
Original data elements		D5					
Original message type		D5					
Original systems trace number		D5					
Original date and time, local transaction		D5					
Original acquiring institution identification code length		D5					
Original acquiring institution identification code		D5					

Table 13 — Files data element directory, continued

Data element name	File and record used in (as identified by record identification code)						Notes
	Claim	Auto Recon	UPC/PLU	Hot Card	ACK	SB	
Original record sequence number		E2					The record sequence number of the detail record in this file that is being adjusted in the Auto-reconciliation addenda record 2 ("E2")
Package size			D4				Expressed in specified units of measure, e.g., if unit of measure is "oz" for ounces, a one (1) pound item would be a package size of "16".
PAN	D4	D4 D5		D4		D4	
PAN length	D4	D4 D5		D4		D4	
PAN record identification code				D4			Identifies whether the PAN is to be added, changed or deleted
POS data code	D4	D4					
Price look-up (PLU)	E3	E2	D4				The second sub-element in the UPC/PLU data if UPC/PLU indicator is "1"; the last position of this sub-element is a check digit; PLU is 5 digits plus the check digit, right justified and zero-filled
Price type			D4				
Processing code	D4	D4				D4	
Purchase indicator			D4				See 10.3.1 for values and usage of this data element
Purchase quantity	E3						Sum of the units purchased of a single UPC/PLU
Receiving institution identification code	A0 A1	A1	A1	A1		A1	
Record identification code	ALL	ALL	ALL	ALL	ALL	ALL	

Table 13 — Files data element directory, continued

Data element name	File and record used in (as identified by record identification code)						Notes
	Claim	Auto Recon	UPC/PLU	Hot Card	ACK	SB	
Record sequence number	ALL	ALL	ALL	ALL	ALL	ALL	
Response code		E1					
Retrieval reference number		E1					
State identifier			A1	A1			This data element is alphanumeric and the values are shown in A.9
Sub-Category code	E3	E2	D4 D6			E4	
Sub-Category code description			D4 D6				
Systems trace audit number	D4	D4					
Total settlement amount		Z1					
Transmission file name					A2		
Unit of measure			D4				Only first 6 characters are significant; see A.8 for values
Units	E3	E2				E4	For CVB, this is the price of the item in pennies up to the available balance (if known)
Universal Product Code (UPC)	E3	E2	D4				The second sub-element in the UPC/PLU data if UPC/PLU indicator is "0"; the last position of this sub-element is a check digit. The UPC is expanded to their full length when used in files.
UPC/PLU data	E3	E2	D4				Data element contains 3 sub-elements; UPC/PLU indicator, UPC or PLU number and UPC/PLU check digit.

Table 13 — Files data element directory, continued

Data element name	File and record used in (as identified by record identification code)						Notes
	Claim	Auto Recon	UPC/PLU	Hot Card	ACK	SB	
UPC/PLU data length	E3	E2	D4				Length value includes the check digit as a significant digit, e.g., 12 digits for UPC-A, 6 digits for 5-digit PLU and check digit, 5 digits for 4-digit PLU and check digit.
UPC/PLU check digit	E3	E2	D4				The last digit of the UPC/PLU data
UPC/PLU indicator	E3	E2	D4				The first sub-element in the UPC/PLU data; value of "0" indicates a UPC and "1" indicates a PLU
WIC authority ID		A1			A2		
WIC merchant ID	D4						
WIC transaction sequence number						D4	
WIC transaction signature length						D4	
WIC transaction signature						D4	

10.3 WIC EBT file data element rules

X9.93 Part 2 Files does not provide details on the usage by WIC EBT processing of some data elements. WIC EBT processing also added data elements to some records. Additional details on the usage of certain data elements and added data elements are provided in this section.

10.3.1 Purchase indicator

Purchase indicator is assigned to a UPC/PLU in the detail record (D4) of the UPC/PLU file. The *Purchase indicator* identifies the UPC or PLU of a food item that can be purchased with benefits assigned in a non-zero Sub-Category (any Sub-Category that is not equal to "000") as well as with benefits assigned in the Broadband Sub-Category. By using the *Purchase indicator*, the size of the WIC UPC/PLU file is reduced because duplicate entries for food items that can be purchased in this manner are eliminated.

A value of zero ("0") in the *Purchase indicator* means that the UPC/PLU food item can only be purchased if benefits exist in the WIC Cardholder benefit balance in the specific Category and Sub-Category identified with that UPC/PLU. If the *Purchase indicator* is set to '0', the UPC/PLU food item will be restricted for redemption to the specific Sub-Category assigned by the WIC State Agency. The *Purchase indicator* for UPC/PLUs for formula food items is always set to '0'.

A value of one (“1”) in the *Purchase indicator* means that the UPC/PLU food item can be purchased with benefits existing in the WIC Cardholder benefit balance in the specific Category and Sub-Category identified with that UPC/PLU or, if there are insufficient benefits in the WIC Cardholder benefit balance in the specific Category and Sub-Category associated with that UPC/PLU, the benefits in the Category and Broadband Sub-Category (“000” value) for the UPC/PLU specified can be used.

A value of one (“1”) in the *Purchase indicator* is the same as older versions of a UPC/PLU file that had two entries for the same UPC/PLU food item; one entry for the Category and a specific Sub-Category and one for the Category and Broadband Sub-Category (“000”). Two entries for the same UPC/PLU food item are no longer allowed.

In WIC Online EBT, the benefit amount needed for a single food item may be partially redeemed from the specific Sub-Category, with the remaining benefits redeemed from the Broadband Sub-Category for a single food item. This method is also known as “sub-cat straddle” because the purchase is “straddled” across two Sub-Categories; the specific Sub-Category and the Broadband Sub-Category (“000”).

In WIC Smart Card EBT, the full benefit amount needed for a single food item must be deducted either from the specific Sub-Category or the Broadband Sub-Category because of processing validation restrictions.

In both WIC Online and Smart Card EBT, a single food item may be assigned to the Broadband Sub-Category (“000”) only and if so, the *Purchase indicator* is set to zero (“0”).

In some implementations based on prior file formats, the *Purchase indicator* may not be present in the WIC UPC/PLU file. If the *Purchase indicator* is not present in the UPC/PLU file detail record for a UPC and there is only one instance of the UPC, then the Broadband Sub-Category ‘000’ shall be treated as if the UPC/PLU for the food item had a Purchase Indicator of “0” restricting redemption to the specified subcategory.

Following are examples of the use of the *Purchase indicator*.

Example 1

A UPC/PLU food item is assigned to Category “06” / Sub-Category “004” and the *Purchase indicator* is set to “1” and the WIC Cardholder attempts to purchase 4 units of the food item.

The WIC Participant's benefit prescription has 2 benefit units in Category “06” / Sub-Category “004” and has 4 benefit units in Category “06” / Sub-Category “000”. There are not enough benefit units available in the specific Sub-Category “004”.

In WIC Online EBT, there are enough benefit units available in Category “06” / Sub-Category “004” combined with benefits from Category “06” / Sub-Category “000” and the food item is redeemed across the two Sub-Categories and the redemption “straddles” the Sub-Categories. The WIC Participant’s ending balance has “0” benefit units remaining in Category “06” / Sub-Category “004” and 2 benefit units remaining in Category “06” / Sub-Category “000”.

In WIC Smart Card EBT, there are enough benefit units available in Category “06” / Sub-Category “000”, so the food item is redeemed from the Broadband Sub-Category. The WIC Participant’s ending balance has 2 benefit units remaining in Category “06” / Sub-Category “004” and “0” benefit units remaining in Category “06” / Sub-Category “000”.

Example 2

Same purchase as in Example 1, however, the WIC Participant's benefit prescription only had 2 benefit units in Category "06" / Sub-Category "004" and 2 benefit units in Category "06" / Sub-Category "000", so there would not be enough benefit units available in the specific Sub-Category "004".

In WIC Online EBT, there are enough benefit units available in Category "06" / Sub-Category "004" combined with benefits from Category "06" / Sub-Category "000" and the food item is redeemed across the two Sub-Categories. The WIC Participant's ending balance has "0" benefit units remaining in Category "06" / Sub-Category "004" and "0" benefit units remaining in Category "06" / Sub-Category "000".

In WIC Smart Card EBT, there are not enough benefit units available in either the Category "06" / Sub-Category "000" or the Category "06" / Sub-Category "004", so the food item cannot be redeemed and an alternative method of payment will be requested.

10.3.2 Manual voucher indicator

The *manual voucher indicator* is a data element in the UPC/PLU detail record used to indicate if an UPC/PLU food item is allowed for purchase with a manual voucher. The default value is "1" – allowed for manual voucher. See A.2 for list of values. The use of manual vouchers shall not be required for WIC Vendors utilizing integrated ECR system card acceptor devices (CADs).

10.3.3 Date, effective and Date, end

The effective and end dates for a food item listed on the UPC/PLU file are used to advise the WIC Vendor the first full day when a food item is available for purchase (*date, effective*) and the last full day when it will be available (*date, end*). New items are added to the UPC/PLU file prior to their effective date. End dates for expiring food items or food items changing to a new category are added to the UPC/PLU file prior to their expiration. Food items are removed from the UPC/PLU file after their expiration date has passed. *Date, effective* and *Date, end* are expressed in GMT. If no *Date, effective* is provided, the data element is defaulted to *File create date* i.e., UPC/PLU is effective upon receipt. If no *Date, end* is entered, the data element is zero-filled and authorization continues.

11 WIC EBT File Formats

This section specifies the file and record formats for the following files used in WIC EBT:

- a) WIC Claim file
- b) WIC Auto-reconciliation file
- c) WIC UPC/PLU file
- d) WIC hot card list
- e) WIC acknowledgment file
- f) WIC state benefit file

11.1 WIC claim files

WIC claim files are submitted from the WIC Vendor to the WIC State Agency in WIC Smart Card EBT only. The data elements used in the WIC Claim file records are shown in Table 13.

The longest record length in the WIC Claim file is 480 positions in WIC claim file detail record (“D4”).

11.1.1 WIC claim file super header record (“A0”)

Table 14 lists the data elements contained in the WIC claim file super header record.

Table 14 — WIC claim file super header record (“A0”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "A0"
Record sequence number	PIC 9(6)	3-8	M	value = "000001"
File create date	PIC 9(8)	9-16	M	CCYYMMDD, in GMT
File create time	PIC 9(6)	17-22	M	hhmmss, in GMT
File format version	PIC 9(2)	23-24	M	value = "04"
Forwarding institution identification code	PIC 9(11)	25-35	M	
File name	PIC X(25)	36-60	M	see 10.1.1

Data element name	Format	Position	Condition	Notes
File type	PIC X(8)	61-68	M	
File sequence number	PIC 9(4)	69-72	M	
Receiving institution identification code	PIC 9(11)	73-83	M	used by Acquirer to identify file recipient
Acquiring institution identification code	PIC 9(11)	84-94	M	used to identify Acquirer if different from the Forwarding institution identification code identified as the sender of this file
Date, claim	PIC 9(8)	95-102	M	used to identify the local claim date for all records in a file

11.1.2 WIC claim file header record (“A1”)

Table 15 lists the data elements contained in the WIC claim file header record.

Table 15 — WIC claim file header record (“A1”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "A1"
Record sequence number	PIC 9(6)	3-8	M	
File create date	PIC 9(8)	9-16	M	CCYYMMDD, in GMT
File create time	PIC 9(6)	17-22	M	hhmmss, in GMT
File format version	PIC 9(2)	23-24	M	value = "04"
Forwarding institution identification code	PIC 9(11)	25-35	M	
File name	PIC X(25)	36-60	M	see 10.1.1
File type	PIC X(8)	61-68	M	
File sequence number	PIC 9(4)	69-72	M	
Receiving institution identification code	PIC 9(11)	73-83	M	used by Acquirer to identify file recipient
Acquiring institution identification code	PIC 9(11)	84-94	M	used to identify Acquirer if different from the Forwarding institution identification code identified as the sender of this file
Date, claim	PIC 9(8)	95-102	M	used to identify the local claim date for all records in a file

11.1.3 WIC claim file detail record (“D4”)

The WIC claim file detail record is based on the messages used in X9.93 with the addition of the *GMT offset* data element.

If the WIC claim file detail record is reporting a benefit reversal, the *ICC result code* in the *ICC related data* data element shall be set to “0x15” and all other data from the original transaction at the POS remains the same. See 12.4.

Table 16 lists the data elements used in the WIC claim file detail record.

Table 16 — WIC claim file detail record (“D4”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "D4"
Record sequence number	PIC 9(6)	3-8	M	
Message type	PIC 9(4)	9-12	M	
WIC merchant ID	PIC X(12)	13-24	M	
Card acceptor identification code	PIC X(15)	25-39	M	
PAN length	PIC 9(2)	40-41	M	
PAN	PIC 9(19)	42-60	M	
Processing code	PIC 9(6)	61-66	M	
Amount, transaction	PIC 9(10)v99	67-78	M	claim amount; amount is zero for denied transactions
Systems trace audit number	PIC 9(6)	79-84	M	
Date and time, transmission	PIC 9(10)	85-94	M	In GMT
Date and time, local transaction	PIC 9(14)	95-108	M	
POS data code	PIC 9(12)	109-120	M	
Acquiring institution identification code	PIC 9(11)	121-131	M	
Card acceptor terminal identification	PIC X(8)	132-139	M	
Card acceptor name /location	PIC X(99)	140-238	M	
Card acceptor name\street\city	PIC x(83)		M	
Card acceptor postal code	PIC X(10)		M	

Data element name	Format	Position	Condition	Notes
Card acceptor region	PIC X(3)		M	
Card acceptor country code	PIC X(3)		M	
Card acceptor county code	PIC X(3)	239-241	C	mandatory if required by bilateral agreement
Card acceptor additional description data	PIC X(100)	242-341	C	mandatory if required by bilateral agreement
Count, items	PIC 9(3)	342-342	M	
Benefit issuing entity	PIC X(15)	343-357	M	
First date to spend	PIC 9(8)	358-365	M	
Amount discount	PIC 9(10)v99	366-377	M	
Integrated circuit card (ICC) system related data	PIC X(99)	378-476	M	Maximum length is 99
ICC result code	PIC X(1)		M	Mandatory if the transaction is for a benefit reversal = "0x15"
GMT offset	PIC 9(4)	477-480	M	

11.1.4 WIC claim file addenda record ("E3")

Table 17 lists the data elements used in the WIC claim file addenda record. The WIC claim file addenda record follows the WIC claim file detail record and may occur multiple times for each associated detail record.

Table 17 — WIC claim file addenda record ("E3")

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "E3"
Record sequence number	PIC 9(6)	3-8	M	
Addenda sequence number	PIC 9(3)	9-11	M	
Category code	PIC 9(2)	12-13	M	
Sub-Category code	PIC 9(3)	14-16	M	
Units	PIC 9(3)v99	17-21	M	quantity for this UPC/PLU
UPC/PLU data	PIC 9(17)	22-38	M	

Data element name	Format	Position	Condition	Notes
UPC/PLU indicator	PIC 9 (1)		M	
UPC or PLU	PIC 9(15)		M	
UPC or PLU check digit	PIC 9(1)		M	
Purchase quantity	PIC 9(3)v99	39-43	M	Number of this UPC/PLU purchased
Claim price	PIC 9(7)v99	44-52	M	total cost of all units of this UPC/PLU purchased
UPC/PLU data length	PIC 9(2)	53-54		

11.1.5 WIC claim file trailer record (“Z1”)

Table 18 lists the data elements used in the WIC claim file trailer record.

Table 18 — WIC claim file trailer record (“Z1”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "Z1"
Record sequence number	PIC 9(6)	3-8	M	
File create date	PIC 9(8)	9-16	M	CCYYMMDD, in GMT
File create time	PIC 9(6)	17-22	M	hhmmss, in GMT
File format version	PIC 9(2)	23-24	M	value – "04"
Count, detail records	PIC 9(7)	25-31	M	
Date, claim	PIC 9(8)	32-39	M	CCYYMMDD, local date
Amount, claimed total	PIC 9(10)v99	40-51	M	
Amount, discount total	PIC 9(10)v99	52-63	M	Absolute value of individual discount amount

11.1.6 WIC claim super trailer record (“Z2”)

Table 19 lists the data elements used in the WIC claim super trailer record.

Table 19 — WIC claim file super trailer record (“Z2”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "Z2"
Record sequence number	PIC 9(6)	3-8	M	
File create date	PIC 9(8)	9-16	M	CCYYMMDD, in GMT
File create time	PIC 9(6)	17-22	M	hhmmss, in GMT
File format version	PIC 9(2)	23-24	M	value = "04"
Count, detail records	PIC 9(7)	25-31	M	
Date, claim file	PIC 9(8)	32-39	M	Local date
Count, claims in file	PIC 9(10)	40-50	M	
Amount, claimed total	PIC 9(10)v99	51-67	M	
Amount, discount total	PIC 9(10)v99	68-79	M	
Amount, claim price total	PIC 9(10)v99	80-91	M	

11.2 WIC auto-reconciliation file

WIC EBT Online and Smart Card processing use the WIC auto-reconciliation file to provide WIC Vendors or their agents with the transactions that were processed and settled for the WIC Vendor. At the WIC Vendor’s option, the WIC Vendor using a third party processor may accept existing commercial payment processing files for reconciliation purposes provided the files comply with the data content requirements for WIC auto-reconciliation files. New direct connect WIC Vendors shall use the format defined in this section.

The file formats shown in X9.93 Part 2 Files have been updated with the additional clarifications and differences shown in this section.

The longest record length in the WIC auto-reconciliation file is 135 positions in the WIC auto-reconciliation detail record (“D4”).

11.2.1 WIC auto-reconciliation super header record (“A0”)

X9.93 Part 2 Files defined the super header record but did not specify the record layout. Table 20 shows the layout of the WIC auto-reconciliation super header record.

Table 20 — WIC auto-reconciliation super header record (“A0”)

Data element name	Format	Position	Condition	Notes
Standard header:				
Record identification code	PIC X(2)	1-2	M	value = "A0"
Record sequence number	PIC 9(6)	3-8	M	value = "000001"
File create date	PIC 9(8)	9-16	M	CCYYMMDD in GMT
File create time	PIC 9(6)	17-22	M	hhmmss in GMT
File format version	PIC 9(2)	23-24	M	value = "04"
Forwarding institution identification code	PIC 9(11)	25-35	M	
File name	PIC X(25)	36-60	M	"AUTO RECONCILIATION FILE"
File type	PIC X(8)	61-68	M	"NEW"
File sequence number	PIC 9(4)	69-72	M	Value – "0001" for initial file being sent. Incremented by 1 for each subsequent new file sent; rolls to "0001" after reaching "9999"

11.2.2 WIC auto-reconciliation header record (“A1”)

The following clarifications apply to the WIC auto-reconciliation header record.

- a) If a super header is used, the *Record sequence number* in the header record is the next sequential number.
- b) The *file create date* and *file create time* are expressed in GMT.
- c) The *file format version* is "04" indicating the 2008 version of the X9.93 Part 2 Files standard.
- d) The *file sequence number* in the header record is the same as in the "A0" super header record.

Table 21 — WIC auto-reconciliation header record (“A1”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "A1"
Record sequence number	PIC 9(6)	3-8	M	See 11.2.2(a)
File create date	PIC 9(8)	9-16	M	CCYYMMDD, in GMT
File create time	PIC 9(6)	17-22	M	hhmmss, in GMT
File format version	PIC 9(2)	23-24	M	value = "04"
Forwarding institution identification code	PIC 9(11)	25-35	M	
File name	PIC X(25)	36-60	M	AUTO-RECONCILIATION FILE
File type	PIC X(8)	61-68	M	NEW

Data element name	Format	Position	Condition	Notes
File sequence number	PIC 9(4)	69-72	M	Same value as in A0 record, if present
Date, settlement	PIC 9(8)	73-80	M	CCYMMDD
Receiving institution identification code	PIC 9(11)	81-91	M	used by Acquirer to identify file recipient
Acquiring institution identification code	PIC 9(11)	92-102	M	used to identify Acquirer if different from the Forwarding institution identification code identified as the sender of this file
WIC authority ID	PIC 9(3)	103-105	C	Used to identify the WIC program authorizing agent

11.2.3 WIC auto-reconciliation detail record (“D4”)

The following clarifications apply to the WIC auto-reconciliation detail record.

- a) The *Amount, transaction* reflects the addition of surcharges.
- b) *Amount, discount* is the total value of all discounts, i.e., discounts or coupons to be subtracted from the transaction.
- c) The *PAN* is right justified and zero filled.
- d) *Date and time, transmission* is incorrectly represented in X9.93 Part 2 Files; the correct representation is MMDDhhmmss expressed in GMT, instead of YYMMDDhhmm.
- e) *Date and time, local transaction*, as adjusted for *GMT offset*, shall be less than or equal to the *File create date* and *File create time* in the WIC auto-reconciliation header record.
- f) The *GMT offset* data element is a constructed data element consisting of two sub-elements as follows:
 - 1) *GMT offset sign*; n 1, where plus (“+”) = 1 and minus (“-”) = 0
 - 2) *GMT offset hours* n 3, 000 through 239. where the first two digits indicate hours and the last digit 10ths of an hour (1 digit decimal implied), i.e., GMT may be -12.0 hours through +14.0 hours
 - 3) The number of hours indicated in *GMT offset hours* is added or subtracted as indicated by the *GMT offset sign* from *Date and time, local transaction* to convert *date and time, local transaction* to GMT. The default value is zero (“0000”). For example, if *GMT offset* is “0070” (-7 hours) and it is 5:00 p.m. GMT, then it is 10:00 a.m. local time because 5:00 p.m. less 7 hours is 10:00 a.m.

Table 22 — WIC auto-reconciliation detail record (“D4”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "D4"
Record sequence number	PIC 9(6)	3-8	M	

Data element name	Format	Position	Condition	Notes
Message type	PIC 9(4)	9-12	M	
PAN length	PIC 9(2)	13-14	M	
PAN	PIC 9(19)	15-33	M	
Processing code	PIC 9(6)	34-39	M	
Amount, transaction	PIC 9(10)v99	40-51	M	amount of claim requested from the merchant
Systems trace audit number	PIC 9(6)	52-57	M	
Date and time, transmission	PIC 9(10)	58-67	M	In GMT
Date and time, local transaction	PIC 9(14)	68-81	M	
POS data code	PIC 9(12)	82-93	M	
Amount, discount	PIC 9(10)v99	94-105	M	
Message reason code	PIC 9(4)	106-109	M	"8400" in 210 message; original value in 420 messages.
Amount, paid	PIC 9(10)v99	110-121	M	equal to Amount, transaction less Amount discount
GMT offset	PIC 9(4)	122-125	C	mandatory if required by the WIC authority or State.

11.2.4 WIC auto-reconciliation addenda record 1 (“E1”)

The following clarifications apply to the WIC auto-reconciliation addenda record 1:

- a) The *Card issuer reference data* may be used by the WIC State Agency or their agent for other data related to the transaction.

Table 23 — WIC auto-reconciliation addenda record 1 (“E1”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "E1"
Record sequence number	PIC 9(6)	3-8	M	
Addenda sequence number	PIC 9(3)	9-11	M	
Acquiring institution identification code	PIC 9(11)	12-22	M	
Retrieval reference number	PIC X(12)	23-34	M	Contains the File envelope name of the original extraction file
Approval code	PIC X(6)	35-40	M	
Response code	PIC X(2)	41-42	M	See X9.58 for list of values
Card acceptor terminal identification	PIC X(8)	43-50	M	
Card acceptor identification code	PIC X(15)	51-65	M	
Card issuer reference data	PIC X(15)	66-80	M	space filled if not required by card issuer

11.2.5 WIC auto-reconciliation addenda record 2 (“E2”)

The following clarifications apply to the WIC auto-reconciliation addenda record 2:

- a) For WIC Online EBT, the WIC auto-reconciliation addenda record 2 provides the detail item level information that was sent in the Financial Presentment request message (210), *EBT data data element* (bit 62-PS) after being updated for any partially approved or declined food items.
- b) For WIC Smart Card EBT, the WIC auto-reconciliation addenda record 2 provides the detail item level information that was sent in the Claim addenda record (“E3”). The *amount, claimed* for a food item is the *claim price* from the Claim addenda record (“E3”), including any surcharges and the *amount, paid* is the *amount, claimed* less any adjustments and discounts.
- c) For both WIC Online and Smart Card EBT, for example, a purchase of 2 gallons of milk shelf priced at \$1.50 each with a NTE price of \$0.90 per gallon where the WIC Cardholder presented two coupons for \$1.00 each at a commissary with a 10% surcharge the amounts would be as shown in the following example:

Record ID code	Data element	Value	Explanation
E2	Amount, claimed	000000000165 (\$1.65)	\$1.50 price plus \$0.15 surcharge
E2	Amount, paid	000000000000 (\$0.00)	\$1.65 adjusted to \$0.90 less discount of \$1.00 (not allowed to be less than zero)
D4	Amount, transaction	00000000330 (\$3.30)	2 times the \$1.65 item price, where the item price is the price after any adjustments by the WIC State Agency
D4	Amount, paid	00000000000 (\$0.00)	Sum of the amount, paid of each WIC auto-reconciliation addenda record 2 (“E2”)

- d) The WIC auto-reconciliation addenda record 2 (“E2”) shall be in both WIC Online and Smart Card EBT implementations that use the WIC auto-reconciliation file formats.

Table 24 — WIC auto-reconciliation addenda record 2 (“E2”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "E2"
Record sequence number	PIC 9(6)	3-8	M	
Addenda sequence number	PIC 9(3)	9-11	M	
Category code	PIC 9(2)	12-13	M	
Sub-Category code	PIC 9(3)	14-16	M	
Units	PIC 9(3)v99	17-21	M	For CVB, this is the price of the item in pennies up to the available balance (if known)
UPC/PLU data	PIC 9(17)	22-38	M	

Data element name	Format	Position	Condition	Notes
UPC/PLU indicator	PIC 9(1)		M	
UPC or PLU	PIC 9(15)		M	
UPC or PLU check digit	PIC 9(1)		M	
Amount, claimed	PIC 9(7)v99	39-47	M	
Amount, paid	PIC 9(10)v99	48-59	M	
Message reason code	PIC 9(4)	60-63	M	reason for an adjustment; see A.5
Original record sequence number	PIC 9(6)	64-69	M	
Original addenda sequence number	PIC 9(3)	70-72	M	
Amount, item discount	PIC 9(10)v99	73-84	M	
UPC/PLU data length	PIC 9(2)	85-86	M	

11.2.6 WIC auto-reconciliation adjustment record (“D5”)

The WIC auto-reconciliation adjustment record shall be used to adjust an entire file amount or the amount of an individual transaction which was reduced from the original amount of the transaction.

The following clarifications apply to the WIC auto-reconciliation adjustment record:

- a) The WIC auto-reconciliation adjustment record (“D5”) shall not be used to create a reversal. Instead, a WIC auto-reconciliation detail record (“D4”) and any associated WIC auto-reconciliation addenda records (“E2”) are created for reversals with a message type identifier value indicating a reversal. The corresponding WIC auto-reconciliation detail record (“D4”) and its associated addenda records for the original transaction that is being reversed shall be created separately.
- b) In WIC Online EBT, the D5 may be created in addition to a reversal record to provide the *Original data elements* from the Financial Presentment (200) message. If created, the *amount, adjustment* in the D5 shall be set to zero to avoid errors in computing the *Total amount settlement* in the Z1 record.

Table 25 — WIC auto-reconciliation adjustment record (“D5”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "D5"
Record sequence number	PIC 9(6)	3-8	M	
Message type	PIC 9(4)	9-12	M	
Amount, adjustment	PIC x + 9(10)v99	13-25	M	x = D if adjustment is due from acquirer; C if the amount is due to the acquirer
Message reason code	PIC 9(4)	26-29	M	see A.5
PAN length	PIC 9(2)	30-31	M	

Data element name	Format	Position	Condition	Notes
PAN	PIC 9(19)	32-50	M	mandatory if Message reason code indicates this is an adjustment for a specific transaction; otherwise zero-filled
Original data elements	PIC X(35)	51-85	M	Mandatory if Message reason code indicates this is an adjustment for a specific transaction; otherwise space-filled
Original message type	PIC 9(4)		M	
Original systems trace audit number	PIC 9(6)		M	
Original data and time, local transaction	PIC 9(12)		M	
Original acquiring institution identification code length	PIC 9(2)		M	
Original acquiring institution identification code	PIC 9(11)		M	
Adjustment memo	PIC X(50)	86-135	M	mandatory if additional data is required for this record; otherwise space filled.

11.2.7 WIC auto-reconciliation trailer record (“Z1”)

The following clarifications apply to the WIC auto-reconciliation trailer record:

- a) The *File create date* and *File create time* are expressed in GMT.
- b) The *Amount, discount total* is the sum of the *Amount, discount* in each of the WIC auto-reconciliation detail (D4) records.

Table 26 — WIC auto-reconciliation trailer record (“Z1”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "Z1"
Record sequence number	PIC 9(6)	3-8	M	
File create date	PIC 9(8)	9-16	M	CCYYMMDD, in GMT
File create time	PIC 9(6)	17-22	M	hhmmss, in GMT
File format version	PIC 9(2)	23-24	M	value = "04"
Count, detail records	PIC 9(7)	25-31	M	
Total settlement amount	PIC x + 9(10)v99	32-44	M	x= D if amount is due from acquirer; C if the amount is due to the acquirer
Date, settlement	PIC 9(8)	45-52	M	CCYYMMDD, in GMT
Amount, discount total	PIC 9(10)v99	53-64	M	Absolute value of individual discount amounts

11.2.8 WIC auto-reconciliation super trailer record (“Z2”)

The WIC auto-reconciliation super trailer record layout was not provided in X9.93 Part 2 Files.

Table 27 lists the data elements used in the WIC auto-reconciliation super trailer record.

Table 27 — WIC auto-reconciliation super trailer record (“Z2”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "Z2"
Record sequence number	PIC 9(6)	3-8	M	
File create date	PIC 9(8)	9-16	M	CCYYMMDD in GMT
File create time	PIC 9(6)	17-22	M	hhmmss in GMT
File format version	PIC 9(2)	23-24	M	value = "04"
Count, detail records	PIC 9(7)	25-31	M	Total number of detail (D4) records

11.2.9 WIC auto-reconciliation amounts processing

Table 28 list describes the sources of the amounts in the WIC auto-reconciliation records.

Table 28 — WIC auto-reconciliation amount data element sources

Auto-reconciliation data element		Source of data element value		
Record ID code	Data element	WIC Online EBT message	WIC Online EBT data element	WIC Smart Card EBT record
D4	Amount, transaction	200 Financial Presentment request	Bit 4, Amount, transaction including any surcharges	Amount, transaction in Claim file “D4” record including any surcharges
D4	Amount, transaction (reversal)	420 Reversal request	Bit 4, Amount, transaction including any surcharges	n/a
D4	Amount, discount	210 Financial Presentment response	Bit 54-4, Amount, amounts additional	Amount, discount, in Claim file “D4” record

Auto-reconciliation data element		Source of data element value		
Record ID code	Data element	WIC Online EBT message	WIC Online EBT data element	WIC Smart Card EBT record
D4	Amount, paid	210 Financial Presentment response	Amount, transaction including any surcharges, less Amount, discount and any adjustments by the WIC State Agency; set to zero if the application of any discounts would result in a negative amount when calculated.	Amount, transaction including any surcharges, less Amount, discount and any adjustments by the WIC State Agency; set to zero if the application of any discounts would result in a negative amount when calculated.
D4	Amount, paid (reversal)	430 Reversal response	Bit 5, Amount, reconciliation	n/a
E2	Amount, claimed	200 Financial Presentment request	Bit 62-PS-6 item price (includes any surcharges) x bit 62-PS-7 purchase quantity	Claim price from Claim file "E3" record
E2	Amount, paid	210 Financial Presentment response	Bit 62-PS-6 item price (includes any surcharges) x bit 62-PS-7 purchase quantity less any associated amount, adjusted from the D5 or other adjustments made by the WIC State Agency; set to zero if the application of any discounts would result in a negative amount when calculated	Amount, claimed from E2 record less any associated amount, adjusted from the D5 or other adjustments made by the WIC State Agency; set to zero if the application of any discounts would result in a negative amount when calculated

The following describes how the amounts in the WIC auto-reconciliation records are related:

- a) The sum of the *amount, paid* of each E2 associated with a D4 less *amount, discount* in the D4 equals the *amount, paid* of the D4.
- b) The sum of the *amount, paid* of each regular D4 in a file less the sum of the *amount, paid* of the reversal D4's in a file equals the *total settlement amount* in the Z1 trailer record.
- c) The *amount, item discount* in E2 records cannot be provided in WIC EBT and is zero-filled. There is no reconciliation of *amount, item discount* in the E2 to the D4 *amount, discount*.
- d) The sum of the *amount, discount* of each original D4 (message type = "1200") in a file less the sum of the *amount, discount* of each reversal D4 (message type = "1420") equals the *amount, discount total* in the Z1 shown as an absolute value.
- e) The *amount, discount total* in the Z1 record has already been netted from the *total settlement amount* in the Z1 record as described in a) through d) above.

11.3 WIC UPC/PLU file

The WIC UPC/PLU file is used to create and update the Authorized Product List (APL). Super-header and Super-trailer records are not used with this file. A single, statewide file shall be produced by each WIC State Agency for use by their WIC vendors. Additional, separate APL files may be produced at the WIC State Agency's option.

The longest record length in the WIC UPC/PLU file is 297 positions, in the WIC UPC/PLU detail ("D4") record.

11.3.1 WIC UPC/PLU header record ("A1")

Table 29 lists the data elements contained in the WIC UPC/PLU header record. In WIC EBT, the UPC/PLU file is a complete replacement of the previous file.

Table 29 — WIC UPC/PLU header record ("A1")

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "A1"
Record sequence number	PIC 9(6)	3-8	M	value = "000001"
File create date	PIC 9(8)	9-16	M	CCYYMMDD in GMT
File create time	PIC 9(6)	17-22	M	hhmmss in GMT
File format version	PIC 9(2)	23-24	M	value = "04"
Forwarding institution identification code	PIC 9(11)	25-35	M	Zero-filled if no forwarding institution
File name	PIC X(25)	36-60	M	"UPC/PLU STORE FILE"
File type	PIC X(8)	61-68	M	"REPLACE"
File sequence number	PIC 9(4)	69-72	M	Value starts over at 0001 after reaching 9999
State identifier	PIC X(2)	73-74	M	See A.9
Receiving institution identification code	PIC 9(11)	75-85	C	Used by EBT Card Issuer processor to identify file recipient; may contain only first 6 digits of receiving institution, right-justified and zero-filled

11.3.2 WIC UPC/PLU detail record ("D4")

The WIC UPC/PLU detail record is based on the messages used in X9.93. Table 30 lists the data elements used in the WIC UPC/PLU detail record. The *manual voucher indicator* data element has been added to the end of the detail record layout shown in X9.93:2008 Part 2 Files as a conditional data element.

Table 30 — WIC UPC/PLU detail record ("D4")

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "D4"
Record sequence number	PIC 9(6)	3-8	M	
message type	PIC 9(4)	9-12	M	value = "1344"

Data element name	Format	Position	Condition	Notes
UPC/PLU data	PIC 9(17)	13-29	M	
UPC/PLU indicator	PIC 9(1)	13	M	
UPC or PLU	PIC 9(15)	14-28	M	
UPC or PLU check digit	PIC 9(1)	29	M	
Item description	PIC X(50)	30-79	M	
Category code	PIC 9(2)	80-81	M	
Category description	PIC X(50)	82-131	M	
Sub-Category code	PIC 9(3)	132-134	M	
Sub-Category description	PIC X(50)	135-184	M	
Unit of measure	PIC X(10)	185-194	M	Only first 6 characters are significant, see A.8.
Package size	PIC 9(3)v99	195-199	M	Default for CVB items is "00100"
Benefit quantity	PIC 9(3)v99	200-204	M	Quantity deducted from WIC Participant's prescription benefit
Benefit unit description	PIC X(50)	205-254	M	Only first 6 characters are significant
Item price	PIC 9(4)v99	255-260	M	If Price type indicates a price is not provided this data element is zero-filled.
Price type	PIC X(2)	261-262	M	CVB items = "03" indicating the CVB item is not subject to cost containment. See X9.93 Part 2 Files for values.
Card acceptor identification code	PIC X(15)	263-277	M	Not used, space-filled
Date, effective	PIC 9(8)	278-285	M	CCYYMMDD, in GMT. If no date is entered, data element is defaulted to File create date i.e., UPC/PLU is effective upon receipt
Date, end	PIC 9(8)	286-293	M	CCYYMMDD, in GMT. If no date is entered, data element is zero-filled and authorization continues
UPC/PLU data length	PIC 9(2)	294-295	M	Includes check digit as a significant digit
Purchase indicator	PIC 9(1)	296	M	See Section 10.3.1
Manual voucher indicator	PIC 9(1)	297	C	Mandatory if manual vouchers are used by the WIC Vendor

11.3.3 WIC UPC/PLU abbreviated detail record ("D6")

The WIC UPC/PLU abbreviated detail record is used to provide information for printing of the benefit unit descriptions on a receipt. The "D6" record shall be provided for every combination of Category and Sub-Category on the WIC UPC/PLU file. The *benefit unit description* data element has been added to the end of the abbreviated detail record layout shown in X9.93:2008 Part 2 Files. Table 31 lists the data elements used in the WIC UPC/PLU detail record.

Table 31 — WIC UPC/PLU abbreviated detail record (“D6”)

Data element name	Format	Position	Condition	Notes
Standard detail:				
Record identification code	PIC X(2)	1-2	M	value = "D6"
Record sequence number	PIC 9(6)	3-8	M	
message type	PIC 9(4)	9-12	M	value = "1344"
Filler	PIC X (67)	13-79	M	
Additional data elements:				
Category code	PIC 9(2)	80-81	M	
Category description	PIC X(50)	82-131	M	
Sub-Category code	PIC 9(3)	132-134	M	
Sub-Category description	PIC X(50)	135-184	M	
Benefit unit description	PIC X(50)	185-234	M	Only first 6 characters are significant

11.3.4 WIC UPC/PLU trailer record (“Z1”)

Table 32 lists the data elements used in the WIC UPC/PLU trailer record.

In WIC EBT, the UPC/PLU file is a complete replacement of any previous version of the file, so only the *Count, records* data element needs to be provided; the additional count data elements in the trailer record are zero-filled.

Table 32 — WIC UPC/PLU trailer record (“Z1”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "Z1"
Record sequence number	PIC 9(6)	3-8	M	
File create date	PIC 9(8)	9-16	M	CCYYMMDD in GMT
File create time	PIC 9(6)	17-22	M	hhmmss in GMT
File format version	PIC 9(2)	23-24	M	value – "04"
Counts, detail records	PIC 9(7)	25-31	M	Total count of D4 and D6 records in the file
Count, adds	PIC 9(7)	32-38	M	Zero-filled
Count, changes	PIC 9(7)	39-45	M	Zero-filled
Count, deletes	PIC 9(7)	46-52	M	Zero-filled
Count, replacements	PIC 9(7)	53-59	M	Zero-filled

11.4 WIC hot card list file

The WIC hot card list file is only used in WIC Smart Card EBT processing and conforms to the record layouts shown in X9.93 Part 2 Files. The WIC hot card list provides the WIC Vendor with a file against which to validate cards prior to completing a purchase. WIC Online EBT Card Issuer Processors maintain information on the status of cards on their host systems.

The longest record length in the WIC hot card list file is 85 positions, in the WIC hot card list header record (“A1”).

Following are additional requirements for the hot card list records and data elements:

- a) The *data and time, effective* data element is in GMT. The *date and time, effective* on the Hot card list must be less than the start date or benefit effective date on the smart card for the card to be accepted.
- b) The *message reason code*, if present, describes the reason the card appears on the Hot card list. The *message reason code* values used on the Hot card list detail records are listed in A.5.

11.4.1 WIC hot card list header record (“A1”)

Table 33 lists the data elements contained in the WIC hot card list header record.

Table 33 — WIC hot card list header record (“A1”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "A1"
Record sequence number	PIC 9(6)	3-8	M	value = "000001"
File create date	PIC 9(8)	9-16	M	CCYYMMDD, in GMT
File create time	PIC 9(6)	17-22	M	hmmss, in GMT
File format version	PIC 9(2)	23-24	M	value = "04"
Forwarding institution identification code	PIC 9(11)	25-35	M	
File name	PIC X(25)	36-60	M	"HOTLIST REPLACEMENT FILE"
File type	PIC X(8)	61-68	M	
File sequence number	PIC 9(4)	69-72	M	
State identifier	PIC X(2)	73-74	M	See A.9
Receiving institution identification code	PIC 9(11)	75-85	C	used by EBT Card Issuer processor to identify file recipient

11.4.2 WIC hot card list detail record (“D4”)

The WIC hot card list detail record is based on the messages used in X9.93. Table 34 lists the data elements used in the WIC hot card list detail record.

Table 34 — WIC hot card list detail record (“D4”)

Data element name	Format	Position	Condition	Notes
Standard detail:				
Record identification code	PIC X(2)	1-2	M	value = "D4"
Record sequence number	PIC 9(6)	3-8	M	
Message type	PIC 9(4)	9-12	M	value = "1344"
Additional data elements:				
PAN record identification code	PIC X(2)	13-14	M	value = "DA" or "DC" or "DD"
PAN length	PIC 9(2)	15-16	M	indicates the length of the PAN in the PAN data element
PAN	PIC 9(19)	17-35	M	right justified, zero filled
date and time, effective	PIC 9(14)	37-49	M	CCYYMMDDhhmmss in GMT
Message reason code	PIC 9(4)	50-53	M	see A.5 for values

11.4.3 WIC hot card list trailer record (“Z1”)

Table 35 lists the data elements used in the WIC hot card list trailer record.

Table 35 —WIC hot card list trailer record (“Z1”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "Z1"
Record sequence number	PIC 9(6)	3-8	M	
File create date	PIC 9(8)	9-16	M	CCYYMMDD, in GMT
File create time	PIC 9(6)	17-22	M	hhmmss, in GMT
File format version	PIC 9(2)	23-24	M	value – "04"
Count, detail records	PIC 9(7)	25-31	M	
Count, hot cards	PIC 9(7)	32-38	M	

11.5 WIC acknowledgment file

The WIC acknowledgment file indicates the file disposition to the file sender. A file may be rejected for transmission errors or claim file errors or accepted for processing. Individual claim detail records may be rejected and the claim amounts for claim files and individual claim detail records accepted for processing may be adjusted.

The longest record length in the WIC acknowledgment file is 2,257 positions, in the WIC acknowledgment file rejection detail record (“D7”).

11.5.1 WIC acknowledgment header record (“A2”)

Table 36 lists the data elements contained in the WIC acknowledgment header record.

Table 36 — WIC acknowledgment header record (“A2”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "A2"
Record sequence number	PIC 9(6)	3-8	M	value = "000001"
File create date	PIC 9(8)	9-16	M	CCYYMMDD, in GMT
File create time	PIC 9(6)	17-22	M	hhmmss, in GMT
File format version	PIC 9(2)	23-24	M	value = "04"
Forwarding institution identification code	PIC 9(11)	25-35	M	
File name	PIC X(25)	36-60	M	"ACKNOWLEDGMENT FILE"
File type	PIC X(8)	61-68	M	
File sequence number	PIC 9(4)	69-72	M	
Transmission file name	PIC X(25)	73-97	M	
Claim file reference ID	PIC X(15)	98-112	C	blank if file status = "T"
File submission date	PIC 9(8)	113-120	M	
File submission time	PIC 9(6)	121-126	M	
File process date	PIC 9(8)	127-134	M	
File process time	PIC 9(6)	135-140	M	
File status code	PIC X(1)	141	M	
File rejection error count	PIC 9(7)	142-148	C	
WIC authority ID	PIC 9(3)	149-151	M	

11.5.2 WIC acknowledgment file rejection detail record (“D7”)

The WIC acknowledgment file rejection detail record is used to describe the error(s) found at a file level. If a file is accepted or if a file contains errors at the record level only, the WIC acknowledgment file rejection detail record is not present. A claim file within an Aggregate file may be rejected or an entire Transactions-only file or Aggregate file may be rejected.

Table 37 lists the data elements contained in the WIC acknowledgment file rejection detail record.

Table 37 — WIC acknowledgment file rejection detail record (“D7”)

Data element name	Format	Position	Condition	Notes
Standard header:				
Record identification code	PIC X(2)	1-2	M	value = "D7"
Record sequence number	PIC 9(6)	3-8	M	
Message type	PIC 9(4)	9-12	M	
Additional data elements:				
Error identifier code	PIC 9(4)	13-16	M	
Error descriptor	PIC x(100)	17-116	M	
Error source	PIC X(15)	117-130	M	
Error detail	PIC X(5)	131-135	O	
Card Acceptor identification code	PIC X(15)	136-150	C	Mandatory if the error identification code refers to a specific Card Acceptor

11.5.3 WIC acknowledgment card acceptor detail record (“D8”)

The WIC acknowledgment card acceptor detail record is used to describe the totals of the transactions received, rejected and accepted for processing in a card acceptor’s claim file. Table 38 lists the data elements contained in the WIC acknowledgment card acceptor detail record.

Table 38 — WIC acknowledgment card acceptor detail record (“D8”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "D8"
Record sequence number	PIC 9(6)	3-8	M	
Message type	PIC 9(4)	9-12	M	
Card acceptor identification code	PIC X(15)	13-27	M	
Count, card acceptor transactions	PIC 9(7)	28-34	M	
Amount, card acceptor claimed	PIC 9(10)v99	35-46	M	
Count, card acceptor rejected transactions	PIC 9(7)	47-53	M	
Amount, card acceptor rejected transactions	PIC 9(10)v99	54-65	M	
Amount, card acceptor accepted transactions	PIC 9(10)v99	66-77	M	
Claim file reference ID accepted	PIC X(15)	78-92	M	

11.5.4 WIC acknowledgment transaction rejection addenda record (“E5”)

Table 39 lists the data elements contained in the WIC acknowledgment transaction rejection addenda record.

Table 39 — WIC acknowledgment transaction rejection addenda record (“E5”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "E5"
Record sequence number	PIC 9(6)	3-8	M	
Addenda sequence number	PIC 9(3)	9-11	M	
Message type	PIC 9(4)	12-15	M	
Card acceptor identification code	PIC X(15)	16-30	M	
Error record sequence number	PIC 9(6)	31-36	M	
Error source	PIC X(15)	37-51	M	
Error identifier code	PIC 9(4)	52-55	M	
Error descriptor	PIC x(100)	56-155	M	
Data element name	PIC X(99)	156-254	M	
Expected value, data element	PIC X(999)	255-1253	M	
Actual value, data element	PIC X(999)	1254-2252	M	
Error detail	PIC X(5)	2253-2257	O	

11.5.5 WIC acknowledgment trailer record (“Z1”)

Table 40 lists the data elements contained in the WIC acknowledgment trailer record.

Table 40 — WIC acknowledgment trailer record (“Z1”)

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "Z1"
Record sequence number	PIC 9(6)	3-8	M	
File create date	PIC 9(8)	9-16	M	CCYYMMDD, in GMT
File create time	PIC 9(6)	17-22	M	hhmmss, in GMT
File format version	PIC 9(2)	23-24	M	value = "04"
Count, detail records	PIC 9(7)	25-31	M	
Count, card acceptor detail records	PIC 9(7)	32-38	M	
Count, accepted records	PIC 9(7)	39-45	M	
Count, rejected records	PIC9(7)	46-52	M	
Count, forwarded files	PIC 9(7)	53-59	M	
Amount, card acceptor claimed total	PIC 9(10)v99	60-71	M	

Data element name	Format	Position	Condition	Notes
Amount, card acceptor rejected transactions total	PIC 9(10)v99	72-83	M	
Amount, card acceptor accepted transactions total	PIC 9(10)v99	84-95	M	

11.6 WIC state benefit file

The WIC state benefit file contains transactions intended to update the benefit information on a cardholder's integrated circuit (Smart) card. It is an optional service that may be implemented by the WIC State Agency. The use of this file shall be approved by FNS prior to implementation.

11.6.1 WIC state benefit header record

Table 41 lists the data elements contained in the WIC state benefit header record.

Table 41 — WIC state benefit header record (“A1”)

Data element name	Format	Position	Condition	Notes
Standard header:				
Record identification code	PIC X(2)	1-2	M	value = "A1"
Record sequence number	PIC 9(6)	3-8	M	value = "000001"
File create date	PIC 9(8)	9-16	M	CCYYMMDD in GMT
File create time	PIC 9(6)	17-22	M	hhmmss in GMT
File format version	PIC 9(2)	23-24	M	value = "04"
Forwarding institution identification code	PIC 9(11)	25-35	M	
File name	PIC X(25)	36-60	M	
File type	PIC X(8)	61-68	M	
File sequence number	PIC 9(4)	69-72	M	
Additional data elements:				
Receiving institution identification code	PIC 9(11)	73-83	M	used by Acquirer to identify file recipient
Acquiring institution identification code	PIC 9(11)	84-94	M	used to identify Acquirer if different from the Forwarding institution identification code identified as the sender of this file

11.6.2 WIC state benefit detail record

Table 42 lists the data elements contained in the WIC state benefit file detail record.

Table 42 — WIC state benefit detail record (“D4”)

Data element name	Format	Position	Condition	Notes
Standard detail:				
Record identification code	PIC X(2)	1-2	M	value = "D4"
Record sequence number	PIC 9(6)	3-8	M	
Message type	PIC 9(4)	9-12	M	
Additional data elements:				
PAN length	PIC 9(2)	13-14	M	
PAN	PIC 9(19)	15-33	M	
Processing code	PIC 9(6)	34-39	M	
Date and time, transmission	PIC 9(10)	40-49	M	
Date and time, local transaction	PIC 9(14)	50-63	M	
Acquiring institution identification code	PIC 9(11)	64-74	M	
Count, items	PIC 9(3)	75-77	M	
Benefit issuing entity	PIC X(15)	78-92	M	
First date to spend	PIC 9(8)	93-1000	M	
Date, end	PIC 9(8)	101-108	M	
WIC Transaction Sequence Number	PIC 9(6)	109-114	M	
WIC Transaction Signature Length	PIC 9(2)	115-116	M	
WIC Transaction Signature	PIC X(99)	117-215	M	

11.6.3 WIC state benefit addenda record

Table 43 lists the data elements contained in the WIC state benefit file addenda record. This record may be repeated to provide updates for multiple categories and sub-categories of benefits.

Table 43 — WIC state benefit addenda record (“E4”)

Data element name	Format	Position	Condition	Notes
Standard addenda:				
Record identification code	PIC x(2)	1-2	M	value = "E4"
Record sequence number	PIC 9(6)	3-8	M	
Addenda sequence number	PIC 9(3)	9-11	M	
Additional data elements:				

Data element name	Format	Position	Condition	Notes
Category code	PIC 9(2)	12-13	M	
Sub-category code	PIC 9(3)	14-16	M	
Units	PIC 9(3)v99	17-21	M	

11.6.4 WIC state benefit trailer record (“Z1”)

Table 44 lists the data elements contained in the WIC state benefit trailer record.

Table 44 — WIC state benefit trailer record

Data element name	Format	Position	Condition	Notes
Standard trailer:				
Record identification code	PIC X(2)	1-2	M	value = "Z1"
Record sequence number	PIC 9(6)	3-8	M	
File create date	PIC 9(8)	9-16	M	CCYYMMDD in GMT
File create time	PIC 9(6)	17-22	M	hhmmss in GMT
File format version	PIC 9(2)	23-24	M	value – "04"
Count, detail records	PIC 9(7)	25-31	M	

12 Processing Considerations

This section describes additional processing considerations for WIC Online and Smart Card EBT.

12.1 Receipt data

Table 45 lists the mandatory data on balance inquiry receipts and Table 46 lists the mandatory data on purchase receipts as identified in the WIC Operating Rules.

For WIC Online EBT, the bit map position and data element name associated with the required receipt data is shown. For WIC Smart Card EBT, card related data is extracted from the card and the record in which the data is passed is shown.

Receipts shall comply with the processing rules as follows:

- a) A balance inquiry is not a separate transaction in Smart Card EBT. A unique systems trace audit number is not assigned to a balance inquiry and the balance inquiry is not included as a separate transaction provided to the WIC State Agency in the claim file.
- b) A purchase receipt shall list the detail of all CVB food items with the *purchase quantity* shown as a cash amount.

Table 45 —Balance inquiry receipt data

Data	Data element name	Online EBT bit	Smart Card EBT record
Last 4 digits of the PAN	Primary account number (PAN)	2	Card
Store name	Card acceptor name/location	43	Claim file D4
Store street address, city, state abbreviation and zip code	Card acceptor name/location	43	Claim file D4
Local date and time of balance inquiry	Date and time, local transaction	12	n/a
Earliest benefit expiration date or benefit effective and benefit ending dates	Earliest benefit expiration date; first date to spend	62-EF	Claim file D4
Benefits available:			
Benefit description	Benefit unit description	From APL file	From APL file
Benefit quantity	Benefit quantity	62-EA-11	Card
Benefit unit of measure	Benefit unit of measure	62-EA-8	Claim file D4
Unique transaction identifier	Systems trace audit number (Online EBT) A combination of data from the transaction to create a unique identifier (Smart Card EBT)	11	n/a

Table 46 —Purchase receipt data

WIC Purchase Receipt	Data element name	Online EBT bit	Smart Card
Local date and time of balance inquiry (Smart Card EBT) Local date and time of purchase (Online EBT)	Date and time, local transaction	12	Claim file D4
WIC Vendor name	Card acceptor name/location	43	Claim file D4
WIC vendor street address, city, state abbreviation and zip code	Card acceptor name/location	43	Claim file D4
Last 4 digits of the PAN	Primary account number (PAN)	2	Card
Store lane number	Card acceptor terminal identification	n/a	Claim file D4
Benefits redeemed:			
Purchase food item quantity	Purchase quantity (in Financial Presentment response (210))	62-PS-7	Claim file E3
Purchased food item description	Sub-Category description from UPC/PLU file based on Sub-Category code (Online EBT) Sub-Category code (Smart Card EBT)	From APL file	From APL file
Purchase food item unit of measure	Unit of measure from UPC/PLU file based on Sub-Category code	From APL file	From APL file
Unit cost	Item price(in Financial Presentment response (210)) (Online EBT) Claim price representing total cost of all purchased units of a single item (Smart Card EBT)	62-PS-6	Claim file E3
Total purchase amount	Sum of Item price x purchase quantity of all items (in Financial Presentment response (210))	62-PS-7 62-PS-6	Claim file D4
Benefit expiration date or benefit effective and benefit ending dates	Earliest benefit expiration date; first date to spend	62-EF	Card
Benefits remaining:			
Benefit description	Benefit unit description	From APL file	From APL file
Benefit quantity	Benefit quantity	62-EA-11	Card
Benefit unit of measure	Benefit unit of measure	62-EA-8	From APL file
Unique transaction identifier	Systems trace audit number (Online EBT) A combination of data from the transaction to create a unique identifier (Smart Card EBT)	11	Claim detail file D4

12.2 UPC/PLU file and National UPC database

The National UPC database (NUPC) is a system maintained by FNS to help State agencies create and maintain their APL files. As part of the NUPC, State agencies may download a preliminary APL file and also download the National Category Subcategory table which contains the Category code, Category description, Sub-category code, Sub-category description and the unit of measure for each WIC UPC item in the NUPC. Check with FNS for the latest file specification.

12.3 WIC Smart Card split tender processing

Split tender refers to a single CVB food item being redeemed in part using CVB and in part using one or more additional methods of payment. Split tender shall not be used for Non-CVB Prescription benefit purchases.

The WIC Smart Card State Agencies document, *Proposal for Smartcard WIC EBT System Implementation of Split Tender and Benefit Reversal Functionality*, contains detailed implementation considerations for the split tender process in the WIC Smart Card EBT environment. The Technical Implementation Guide has been updated to support the required data elements, record and file formatting specified in the document, subject to final FNS approval.

12.4 WIC Smart Card EBT benefit reversal processing

Benefit reversal refers to restoring the benefits to a WIC Cardholder's smart card by voiding or cancelling a prior transaction which results in WIC prescription food benefits on the card being restored to the previous WIC prescription food balance. The following processing rules shall be followed for benefit reversals:

- a) Benefit reversals shall be done within the same transaction at the POS and after the WIC portion of a purchase has been recorded as a new balance on the card.
- b) If a WIC Cardholder does not have additional methods of payment for a split tender transaction, a benefit reversal transaction may be performed at the WIC Vendor location.
- c) To suspend a transaction is to place it in a "hold" state to resume or delete at a later time. A benefit reversal shall be completed prior to placing the POS transaction in a suspend state.
- d) The benefits reversed shall be returned to the original benefit information stored on the card, regardless of the time at which the benefit reversal occurred.

The WIC Smart Card WIC State Agencies document, *Proposal for Smartcard WIC EBT System Implementation of Split Tender and Benefit Reversal Functionality*, contains detailed implementation considerations for the benefit reversal process. The Technical Implementation Guide has been updated to support the required data elements, record and file formatting specified in the document.

Annex A – Data element code tables

Additional data element code values have been assigned for use in WIC EBT as shown in this section. Requests for additional values or the use of any values indicated as reserved (for any reason) shall be sent to FNS for review and approval prior to implementation. For a complete list of all values of a data element, refer to the X9.93 and ISO 8583 standards.

A.1 Error identifier code (“D7” and “E5” records)

The *Error identifier code* data element is used in the WIC Acknowledgment File Rejection Detail record (D7) and the WIC Acknowledgment Transaction Rejection Addenda record (E5) to indicate the reason the file or record was rejected. Table 47 shows the values assigned. Those values which are reserved shall be submitted to FNS for approval prior to use.

Table 47 — Error identifier codes

Code	Error identifier code description
0000	No error
0001-0100	Reserved
0101- 0999	File level error identifier codes
0101	The line length does not match format of the version specified
0102	The data provided does not match the format specified. For example, Data = 05/03/2000, Format = YYYYMMDD.
0103	A date field contained invalid characters or the date separator characters were in the wrong place.
0104	A field required more digits than what was provided in the data. For example, Data = 050400, Format = MMDDYY i.e., expected a four digit year and only got a two digit year.
0105-0107	Reserved
0108	The month portion of a date string was not within the range of 1 – 12.
0109	The day portion of a date string was not within the range of 1 – 31.
0111	A general purpose error occurred
0112	The date provided was prior to the minimum acceptable date.
0113	The date provided exceeded the maximum acceptable date.
0114	The trailer does not begin with a valid entry. "Z1"
0115	An unexpected record type was encountered where a detail, addenda or trailer record was expected.
0116-0120	Reserved
0121	Invalid date/time - improperly formed or in the future
0122-0127	Reserved
0128	An attempt was made to read past the end of file. (Unexpected end of file marker)

Table 47 - Error identifier codes, continued

Code	Error identifier code description
0129	The extraction file was received before the date encoded in the file name.
0130-0131	Reserved
0132	The Claim date specified in the header and the Claim date specified in the trailer do not match.
0133	Reserved
0134	The number of purchases specified in the trailer record does not match the number of purchases found between in the trailer record and its preceding header.
0135	The Total Amount, claimed specified in the trailer record does not match the sum of the individual detail record Transaction Amounts between the trailer record and its preceding header.
0136	The File Format field in the claim header contained an unsupported file format identifier.
0137-0142	Reserved
0143	Claim Total error
0144-0149	Reserved
0150	When reading string data, the number of bytes retrieved was less than the number expected.
0151-0158	Reserved
0159	Every purchase in a V2 claim file or a V4 Aggregate section <i>must</i> have the same Merchant ID. This claim file contains purchase records with varying Merchant ID values.
0160	Reserved
0161	An invalid character was found in a claim file record. The invalid character is often an alphabetic character in a numeric field.
0162	A numeric field contained fewer readable characters than expected.
0163-0168	Reserved
0169	This file's name has an invalid character in the extension. The last two characters of a claim file's extension must specify a unique suffix for the file that will ensure that two files received from the same submitter on the same day do not have the same name. The suffix can be any combination of the digits 0-9 and the letters A-Z. All other characters are invalid.
0170-0176	Reserved
0177	The claim file contains a control character. WIC claim files must only contain printable characters, carriage return/newline characters and an end-of-file marker.
0178	Reserved
0179	An invalid record sequence number was provided in a header record.
0180-0181	Reserved
0182	Header ID was invalid. This is a static field and should ALWAYS contain the letters "A1"
0183	The File Name field is a static field and should ALWAYS contain the appropriate value for the specified format.
0184—187	Reserved
0188	The Receiving Institution Identification Code appears in the WIC claim file header. It must be numeric and <i>must</i> consist of the target WIC Authority BIN padded on the left with five zeros.
0189-0192	Reserved

Table 47 - Error identifier codes, continued

Code	Error identifier code description
0193	Each addenda record associated with a particular purchase must have the same Record Sequence Number as the detail (purchase) record with which it is associated. At least one addenda record has an invalid Record Sequence Number.
0194-0197	Reserved
0198	More than one extraction in zipped submission claim file
0199	A compression error was encountered while processing the file. No extractions were retrieved.
0200	The Extraction file name has already been submitted
0201	The File Type field is a static field and should ALWAYS contain "NEW" right padded with spaces to the appropriate length for the specified version
0202	Extraction file is empty (zero length), EOF encountered while trying to read the header.
0203	File is of unknown type. check the header length.
0204-0209	Reserved
0210	Submission or Extraction is not from an authorized Forwarding Institution or Acquirer.
0211	Submission and Extraction filenames must be 12 characters long.
0212-0218	Reserved
0219	The Total Discount Amount field in the trailer record does not match the sum of the detail record Discount Amounts between it and its preceding header.
0220-0226	Reserved
0227	The File Create Date must occur on or before the Received Date.
0228	The first four characters of the file name are encoded with invalid values.
0227-0243	Reserved
0244	The File Sequence Number in the claim header is a mandatory field. It must contain a value greater than zero.
0245-0251	Reserved
0252	An invalid record sequence number was provided in a trailer record.
0253-0299	Reserved
0300	Error parsing settled claim file
0301-0311	Reserved
0312	A non-detail record was encountered where a detail record was expected.
0313	An invalid record was read while attempting to read an aggregate file's super trailer record.
0314-0315	Reserved
0316	An unexpected record type was encountered where a detail, addenda or trailer record was expected.
0317-0322	Reserved
0323	An unexpected record was read while attempting to read the main header record.
0324	Reserved
0325	The Count, claims in file in the super trailer is incorrect. The Count, Claims field is expected to represent the number of discreet vendors in a Transactions-Only file and the number of header/trailer sections in an Aggregate file.

Table 47 - Error identifier codes, continued

Code	Error identifier code description
0326	The super trailer's Amount, claim price total (Transactions-Only) must equal the sum total of Claim Price in all addenda records.
0327	The super trailer's File Format Version must equal the super header's File Format Version.
0328	The super header's File Format Version must be equal to or greater than a sub-section's header File Format Version. (The super header File Format Version cannot be less than Version 4.)
0329	Reserved
0330	A submission with the same name has already been processed, or is in process.
0331	Reserved
0332	Invalid Submission Tracking ID specified in the second through fourth characters of file name.
0333	Invalid Suffix - Last 2 characters of extension
0334	A Claim Submission File must have .TXX suffix.
0335	The extraction file name must have a .CXX suffix.
0335	Reserved
0337	The date encoded within the filename was invalid.
0338	Reserved
0339	The Count of the Detail Records Count, Detail Record specified in the super trailer record does not match the number of detail records found between it and its super header record.
0340	The Total Amount, claimed specified in the super trailer record does not match the sum of the individual detail record Transaction Amounts between it and its super header record.
0341	The File Create Date must occur on or before the current system date.
0342	The Total Discount Amount specified in the super trailer record does not match the sum of the detail record Discount Amounts between it and its super header record.
0343	The Total Claim Price Amount specified in the super trailer record does not equal the sum total of Claim Price in all addenda records.
0344	The maximum number of errors has been exceeded.
0344-0347	Reserved
0348	Submission is not in the IN folder
0349	Extract does not contain any claims which could be processed.
0350	There are no Detail or Addenda records for this Card Acceptor, only Header and Trailer Records
0350-0999	Reserved
1000- 1999	Transaction level error identifier codes
1000-1101	Reserved
1102	The data provided does not match the format specified. For example, Data = 05/03/2000, Format = YYYYMMDD.
1103	A date field contained invalid characters or the date separator characters were in the wrong place.
1104	A field required more digits than what was provided in the data. For example, Data = 050400, Format = MMDDYYYY i.e., expected a four digit year and only got a two digit year.
1107	When attempting to validate a date element within a date string, the requisite number of digits was not present.

Table 47 - Error identifier codes, continued

Code	Error identifier code description
1108	The month portion of a date string was not within the range of 1 – 12.
1109	The day portion of a date string was not within the range of 1 – 31.
1111	A date field contained a reference to an invalid day. For example, January 32, 2000 (01322000).
1112	The date provided was prior to the minimum acceptable date.
1117	This transaction signature has been presented in a previous file. It cannot be duplicated.
1118	This transaction appears more than once in the same claim file. It cannot be duplicated.
1113	The date provided exceeded the maximum acceptable date.
1141	The message type in a purchase detail record did not match the claim format version.
1142	An addenda record was presented out of sequence.
1143	For successful transactions, the number of purchase items specified in the purchase detail record must be greater than zero.
1144	An unexpected End-of-File condition was encountered. This generally indicates that the file has been truncated.
1150	When reading string data, the number of bytes retrieved was less than the number expected.
1161	An invalid character was found in a claim file record. The invalid character is often an alphabetic character in a numeric field.
1162	A numeric field contained fewer readable characters than expected.
1164	The Primary Account Number (PAN) associated with a transaction contained a BIN for a WIC agency other than the WIC agency that submitted to claim. Certified EBT systems are required to ensure that each purchase is sent to the appropriate WIC agency for processing. All purchases within a WIC claim file <i>must</i> have the same BIN.
1165	The PAN was less than or equal to zero. The PAN must represent a non-zero positive integer. All 19 characters in the PAN field MUST be digits. If there are fewer than 19 significant digits, the PAN must be left padded with zeros.
1166	The File Create Date is a date/time that indicates when the claim file was created. Each Transaction Date/Time in the file MUST be less than or equal to the File Create Date/Time
1170	A hex string was submitted that contained invalid characters. Valid characters are 0-9, A-F, and a-f.
1173	The record identifier for a claim detail record does not comply with the standard for the specified version.
1174	The process code for a purchase in this claim file was incorrect. The process code is a static value as defined for the specified version.
1175	The record sequence number for a purchase is invalid or is out of order
1176	The PAN length indicator for a purchase was not within the range of 1 to 19. This is the only valid range of values
1177	The claim file contains a control character. WIC claim files must only contain printable characters, carriage return/newline characters and an end-of-file marker.
1185	The time portion of a date/time field provided was non-numeric. Time values must consist of exactly 6 digits and must be in the form HHMMSS.
1186	One of the time elements within a Date/Time value was out of range. The hour portion must not exceed 23 and the minute and second portions must not exceed 59.
1190	The record identifier for a claim addenda record does not comply with the standard for the specified version.
1191	The addenda record has the incorrect length for the version specified.
1195	The UPC field in the addenda record is a numeric field. The UPC value includes non-digit characters.

Table 47 - Error identifier codes, continued

Code	Error identifier code description
1196	A price was claimed for an item, but the number of benefit units consumed was reported as zero
1201	Illegal PAN transaction type.
1202	Illegal PAN card type.
1210	A maximum of 255 addenda records can be associated with each detail record. This file contained at least one detail record that was associated with more than 255 addenda records.
1215	The POS Data Code field must contain the value 510111111334 or 510211111334.
1217	The TLV data in the ICC System Related Data field is invalid.
1220	Transaction amount is greater than zero for a failed transaction. When the ICC result code portion of the ICC System Related Data field is non-zero, indicating a failed transaction, the Transaction Amount is invalid and must be zero.
1223	First Day to Spend field is not filled with zeroes for a failed transaction. When the ICC result code portion of the ICC System Related Data field is non-zero, indicating a failed transaction, the First Day to Spend field must be filled with zeroes.
1224	Item Count was greater than zero for a failed transaction. When the ICC result code portion of the ICC System Related Data field is non-zero, indicating a failed transaction, the Item Count field must be equal to zero.
1226	The purchase Transaction Amount minus the purchase Discount Amount must be equal to the sum of the addenda Claim Price amounts for that purchase.
1247	The value for the Systems trace Audit Number was zero.
1249	No value was specified for the Card Acceptor Terminal ID.
1260	The unit amount and claim price of a CVV category must be the same.
1304	An attempt to combine two values from a claim file resulted in an out-of-range error.
1307	The number of E3 Addenda records does not equal the number in the D4 item count field.
1308	The First Day to Spend date must occur on or before the File Create Date.
1309	First Day to Spend field was filled with zeroes for a good transaction. When the ICC result code portion of the ICC System Related Data field is zero, indicating a good transaction, the First Day to Spend field must be non-zero.
1314	Multiple sections for the same WIC Card Acceptor occurred within the file. The transactions of the first section are processed. Transactions of all subsequent sections are rejected.
1318	Time zone offset in the GMT offset should only be numeric.
1319	GMT offset error; First position must be 0 or 1; Positions 2-3 must be in range of 00-23; Position 4 in range of 0-9
1351	The date provided was prior to the minimum acceptable date.
1352-1999	Reserved
2000-2999	Extraction section level error identifier codes
2000-2101	Reserved
2102	The data provided does not match the format specified. For example, Data = 05/03/2000, Format = YYYYMMDD.
2103	A date field contained invalid characters or the date separator characters were in the wrong place.
2104	A field required more digits than what was provided in the data. For example, Data = 050400, Format = MMDDYYYY i.e., expected a four digit year and only got a two digit year.
2105-2107	Reserved

Table 47 - Error identifier codes, continued

Code	Error identifier code description
2108	The month portion of a date string was not within the range of 1 – 12.
2109	The day portion of a date string was not within the range of 1 – 31.
2110-2111	Reserved
2112	The date provided was prior to the minimum acceptable date.
2113	The date provided exceeded the maximum acceptable date.
2114-2130	Reserved
2131	The File Format field in the claim trailer contained an unsupported file format identifier.
2132	The Creation Date specified in the header and the Creation Date specified in the trailer do not match.
2133	The Claim date specified in the header and the Claim date specified in the trailer do not match.
2134	The number of purchases specified in the trailer record does not match the number of purchases found between in the trailer record and its preceding header.
2135	The Total Amount, claimed specified in the trailer record does not match the sum of the individual detail record Transaction Amounts between the trailer record and its preceding header.
2136-2149	Reserved
2150	When reading string data, the number of bytes retrieved was less than the number expected.
2151-2158	Reserved
2159	Every purchase in a single store claim file or a V4 Aggregate section MUST have the same Merchant ID. This claim file/section contains purchase records with varying Merchant ID values.
2160	Reserved
2161	An invalid character was found in a claim file record. The invalid character is often an alphabetic character in a numeric field.
2162	A numeric field contained fewer readable characters than expected.
2163-2176	Reserved
2177	The claim file contains a control character. WIC claim files must only contain printable characters, carriage return/newline characters and an end-of-file marker.
2168-2182	Reserved
2183	The File Name field is a static field and should ALWAYS contain the appropriate value for the specified format.
2184-2200	Reserved
2201	The File Type field is a static field and should ALWAYS contain "NEW" right padded with spaces to the appropriate length for the specified version
2202-2218	Reserved
2219	The Total Discount Amount field in the trailer record does not match the sum of the detail record Discount Amounts between it and its preceding header.
2220-2315	Reserved

Table 47 - Error identifier codes, continued

Code	Error identifier code description
2316	An unexpected record type was encountered where a detail, addenda or trailer record was expected.
2317-2328	Reserved
2329	The Aggregate sub-section header File Create Date must be less than or equal to the main header's File Create Date.
2330-2346	Reserved
2347	The File Format Version in the sub-section header cannot be less than Version 4.
2348-2349	Reserved
2350	There are no Detail or Addenda records for this Card Acceptor, only Header and Trailer Records
2351	The date provided was prior to the minimum acceptable date.
2351-2999	Reserved
3000-3999	File level warning error identifier codes
3000-3149	Reserved
3150	When reading string data, the number of bytes retrieved was less than the number expected.
3151	Reserved
3161	An invalid character was found in a claim file record. The invalid character is often an alphabetic character in a numeric field.
3162	A numeric field contained fewer readable characters than expected.
3163-3176	Reserved
3177	The claim file contains a control character. WIC claim files must only contain printable characters, carriage return/newline characters and an end-of-file marker.
3178	The Card Acceptor ID includes non-digit characters.
3179-3212	Reserved
3213	The Record Count field is not used by the WIC Authority and it must be filled with zeros.
3214	The Record Rejected Count field is not used by the WIC Authority and it must be filled with zeros.
3215-3323	Reserved
3324	An unexpected record was read while attempting to read a sub-header record following a main header record.
3325-3999	Reserved
4000-9999	Reserved

A.2 Integrated circuit card (ICC) result code (“D4” record)

The *Integrated circuit card (ICC) result code* is a tag used in the *Integrated circuit card (ICC) data* data field in the WIC Claim file detail (“D4”) record to provide information on the result of transaction conducted with the Smart Card. Table 48 shows the existing values and a new value “0x15” used to indicate a reversal was done at the POS.

Table 48 — Integrated circuit card (ICC) result code values

Value	Description
0x00	Card OK
0x01	PIN already blocked
0x02	CSN read failure
0x03	DFsystem read failure
0x04	Cryptographic authentication failure
0x05	DFWIC read failure
0x06	Secret code presentation failure
0x07	BIN not authorized
0x08	Invalid PIN lock
0x09	Invalid data version
0x10	Food prescription conflict
0x11	No food benefits available
0x12	PIN presentation failure
0x13	Card hot carded by the grocer
0x14	Card presented is already hot carded
0x15	Benefits reversed

A.3 Item action code (62-ED-20, 62-PS-8)

The *Item action code* sub-element in *EBT data* (bit 62) is used in the *EBT file update response data* (dataset identifier “ED”, bit 20) and the *WIC prescription food item* (dataset identifier “PS”, bit 8) to indicate the action to be taken on the identified food item. Table 49 shows additional values added for WIC EBT.

Table 49 —New Item action codes

Code	Item action text
26	Approved for a lower price due to NTE price exceeded
27	Approved for a lower price due to NTE price exceeded and approved for less units than originally requested due to insufficient units
28	Approved for less units than originally requested due to insufficient units

A.4 Manual voucher indicator (bit 62-ED-19 and “D4” record)

The *manual voucher indicator* is used in online messages in *EBT data* (bit 62) in the *EBT file update response data* (dataset identifier “ED” bit19) and in UPC/PLU detail (“D4”) records to indicate if a food item is allowed for purchase with a manual voucher. Table 50 shows the assigned values.

Table 50 — Manual voucher indicator values

Value	Description
0	Not allowed for manual voucher
1	Allowed for manual voucher (default)
2-9	Reserved for FNS

A.5 Message reason codes (bit 25 and “D4” records)

The *message reason code* is used in online messages in bit 25 and in detail (“D4”) records to indicate the reason a message or record was sent. X9.93 Part 2 Files references X9.93 Part 1 Messages and ISO 8583 for the message reason code values. WIC EBT has assigned additional values as shown in italics in Table 51.

Table 51 — Message reason codes

Usage	Codes	Description
	0000	No error
	0001-0999	Reserved
Online advice messages (x2x)	Range 1000-1499	Reason for an advice message rather than a request message
	1000	stand-in processing at the card issuer's option
	1001	card issuer signed off
	1002	card issuer timed out on original request
	1003	card issuer unavailable
	1004	terminal processed
	1005	ICC processed
	1006	under floor limit
	1007	stand-in processing at the acquirer's option
	1008	Stand-in processing at the receiver's option
	1009	Receiver signed off
	1010	Receiver timed out on original request
	1011	Receiver unavailable
	1012-1150	Reserved for ISO use

Table 51 – Message reason codes, continued

Usage	Codes	Description
	1151-1375	Reserved for national use
	1376-1499	Reserved for private use
Online request messages (x0x)	Range 1500-1999	Reason for an authorization/financial presentment message rather than an advice/notification message
	Range 2000-2999	Reason for a representment
Online file action messages (3xx)	Range 3000-3999	Reason for a file action message
Hot card list detail record (D4)	3000	Lost
	3001	Stolen
	3002	Undelivered card <i>prior to receipt at WIC State Agency</i>
	3003	Counterfeit card – <i>PAN confirmed</i>
	3004	Other
	3005-3399	Reserved for ISO use
	3400-3699	Reserved for national use
	3700	<i>Failed to function prior to issuance</i>
	3701	<i>Missing – delivered but prior to issuance</i>
	3702	<i>Damaged – delivered but prior to issuance</i>
	3703	<i>Damaged – after issuance</i>
	3704	<i>Failed to function after issuance</i>
	3705	<i>Dual participation, card in</i>
	3706	<i>Transferred to Non-EBT state, card</i>
	3707	<i>Partial family transfer to any site, card</i>
	3708-3999	Reserved for private use
Reversal messages (4x0)	4000-5559	Reason for a reversal
	4000	Customer cancellation
	4001	Unspecified, no action taken
	4002	Suspected malfunction
	4003	Format error, no action taken
	4004	Completed partially
	4005	Original amount incorrect
	4006	Response received too late
	4007	Card acceptor device unable to complete transaction

Table 51 – Message reason codes, continued

Usage	Codes	Description
	4008	Deposit out of balance
	4009	No check in envelope
	4010	Payment out of balance
	4011	Deposit out of balance/applied contents
	4012	Payment out of balance/applied contents
	4013	Unable to deliver message to point of service
	4014	Suspected malfunction/care retained
	4015	Suspected malfunction/card returned
	4016	Suspected malfunction/track 3 not updated
	4017	Suspected malfunction/no cash dispensed
	4018	Timed-out at taking money/no cash dispensed
	4019	Timed-out at taking card/card retained and no cash dispensed
	4020	Invalid response, no action taken
	4021	Timeout waiting for response
	4022-4199	Reserved for ISO use
	4200-4350	Reserved for national use
	4351-4499	Reserved for private use
Chargeback messages (4x2)	4500-4999	Reason for a chargeback (not used in WIC EBT)
Reconciliation messages (5xx)	5000-5999	Reason for a reconciliation
	5000-5299	Reserved for ISO use
	5300-5599	Reserved for national use
<i>Auto-reconciliation detail record (D4)</i>	<i>5600</i>	<i>Invalid (failed) transaction</i>
	<i>5601</i>	<i>Duplicate purchase</i>
	<i>5602</i>	<i>For test card</i>
	<i>5603</i>	<i>Other state's PAN – risk management</i>
	<i>5604</i>	<i>Card on hot card list</i>
	<i>5605</i>	<i>Purchase not received timely</i>
	<i>5606</i>	<i>Purchase in the vendor's termination period</i>
	<i>5607</i>	<i>Invalid date format</i>
	<i>5608</i>	<i>Purchase date in the future</i>
	<i>5609</i>	<i>Purchase after last date to spend</i>
	<i>5610</i>	<i>Purchase before first date to spend</i>

Table 51 – Message reason codes, continued

Usage	Codes	Description
	5611	<i>Invalid signature</i>
	5612-5614	<i>Reserved</i>
	5615	<i>Vendor hold</i>
	5616	<i>Purchase items adjustment total</i>
	5617	<i>No first date to spend</i>
	5618	<i>Not EBT certified</i>
	5619	<i>Not a WIC PIN</i>
	5620	<i>Illegal PAN check digit</i>
<i>Auto-reconciliation addenda record 2 (E2)</i>	5621	<i>UPC redeemed out of Date Range</i>
	5622-5649	<i>Reserved</i>
<i>Auto-reconciliation addenda record 2 (E2)</i>	5650	<i>Invalid category</i>
	5651	<i>Invalid or not WIC allowable UPC/PLU</i>
	5652	<i>UPC/PLU doesn't match cat/sub-category</i>
<i>Auto-reconciliation adjustment record (D5)</i>	5653	<i>Compliance buy</i>
<i>Auto-reconciliation addenda record 2 (E2)</i>	5654	<i>Amount exceeds not-to-exceed price</i>
	5655	<i>PWIC exceed TWIC Avg * Rate</i>
	5656	<i>TWIC exceeds PWIC Avg * Rate</i>
	5657	<i>PWIC exceeds TWIC Avg</i>
	5658	<i>TWIC exceeds PWIC Avg</i>
<i>Auto-reconciliation adjustment record (D5)</i>	5659	<i>Manual cost containment adjustment</i>
	5660-5694	<i>Reserved</i>
	5695	<i>Malformed claim exception</i>
	5696	<i>Other credit/debit</i>
	5697	<i>Monitor disallowance (post payment) credit/debit</i>
	5698	<i>Sampling electronic submission credit/debit</i>
	5699	<i>Increase based upon appeal credit/debit</i>
	5700	<i>Reserved</i>
<i>Auto-reconciliation detail record (D4)</i>	5701	<i>PIN Already Blocked</i>
	5702	<i>CSN Read Failure</i>
	5703	<i>DF System Read Failure</i>
	5704	<i>Cryptographic Authentication Failure</i>
	5705	<i>DFWIC Read Failure</i>
	5706	<i>Secret Code Presentation Failure</i>

Table 51 – Message reason codes, continued

Usage	Codes	Description
	5707	<i>BIN Not Authorized</i>
	5708	<i>Invalid PIN Lock</i>
	5709	<i>Invalid Data Version</i>
	5710	<i>Food Prescription Conflict</i>
	5711	<i>No Food Package for Current Date</i>
	5712	<i>PIN Presentation Failure</i>
	5713	<i>Card Hot-Carded By Grocer</i>
	5714	<i>Card Presented is Already Hot-Carded</i>
	5715	<i>Transaction Reversal Occurred</i>
	5716-5999	<i>Reserved</i>
Retrieval requests and fulfillments	6000-6499	Reserved, see ISO 8583
Administrative messages	6500-6999	Reserved, see ISO 8583
Fee collection	7000-7999	Reserved, see ISO 8583
Network management	8000-8099	Reserved, see ISO 8583
Key change	8100-8199	Reserved, see ISO 8583
Reserved	8200-9999	Reserved

A.6 Purchase indicator (bit 62-ED-17 and “D4” record)

The *purchase indicator* data element is used in both online messages and in UPC/PLU detail records to indicate a food item that can be purchased with benefits assigned in a non-zero Sub-Category as well as with benefits assigned in the Broadband Sub-Category. The descriptions shown for *purchase indicator* values in X9.93 Part 1 Messages have been clarified. The updated descriptions are shown in Table 52.

Table 52 — Purchase indicator code values

Code	Description
0	UPC redeemable only in the specified Sub-Category; default
1	UPC authorized for redemption in the Broadband (“000”) Sub-Category as well as the specified Sub-Category
2-9	Reserved for FNS use

A.7 File envelope identifier code

The *File envelope identifier code* data element is used in the File envelope name that precedes the file content to identify characteristics of the file. Table 53 lists the File envelope identifier codes.

Table 53 —File envelope identifier codes

Code	Description
A	WIC auto-reconciliation file
C	File contains an extraction that conforms to X9.93 Part 2 Files
D	Duplicate submission file
F	Duplicate extraction file
K	Successful non-duplicate extraction file; pre-processing completed
P	Unauthorized submission tracking ID in file
S	EBT card acceptor claim file
T	Claim submission file contains an extraction that conforms to X9.93 Part 2 Files
U	Update to previous successful extraction file
Z	Compression or naming error in submitted file

A.8 Unit of measure (bit 62-EA-8 and “D4” UPC/PLU and Claim file records)

The *unit of measure* data element is used in Online EBT in *EBT data* (bit 62) with the dataset identifier “EA” (bit 62-EA-8) and in Smart Card EBT in the UPC/PLU file “D4” record and the Claim file “D4” record. The values shown in Table 54 for the *unit of measure* have been added and shall be used to standardize the display on receipts and the data in the APL file that represent the food item benefit unit of measure, i.e., 1 gallon of milk would have a *unit of measure* value of “GAL”.

Table 54 — WIC EBT Unit of measure literal values

Value	Description
BAG	Bag
BAR	Bar
BTL	Bottle
BOX	Box
BRK	Brick
CBL	Can / Bottle

Value	Description
CAN	Can
CAP	Capsules
CTN	Carton
CAS	Case
CON	Container
DOZ	Dozen
ENV	Envelope
GAL	Gallon
HGL	Half Gallon
JBG	Jar / Bag
JAR	Jar
JUG	Jug
LCN	Liquid Concentrate
LTR	Liters
OZ	Ounce
OZD	Ounce (dry)
OZF	Ounce (fluid)
PCK	Pack
PKG	Package
PKT	Packet
PT	Pint
PCH	Pouch
LB	Pound
PDR	Powder
PUD	Pudding
QT	Quart
RPD	Ready to Feed Pudding
RTF	Ready to Feed
SBR	Solid Bar
\$\$\$	Cash Value Benefit (CVB)

A.9 WIC State Agency identifiers

The *WIC Authority ID* listing in X9.93 Part 1 Messages is used to identify WIC State Agencies. The *State identifier* data element is used in X9.93 Part 2 Files for the same purpose. WIC State Agencies also may be identified by their institution identification number (IIN) or BIN, a list of which are available from FNS. Table 55 provides a cross-referenced list of the *state identifier codes* and *WIC Authority ID* values.

Table 55 —State identifier codes and WIC Authority IDs

WIC State Agency	State Identifier Code	FNS Region	WIC Authority ID
Acoma, Canoncito, and Laguna (ACL)	A1	SW	001
Alabama	AL	SE	002
Alaska	AK	W	003
American Samoa	AS	W	004
Arizona	AZ	W	005
Arkansas	AR	SW	006
California	CA	W	007
Cherokee Nation of Oklahoma	C2	SW	009
Cheyenne River Sioux Tribe	C3	MP	010
Chickasaw Nation	C4	SW	011
Choctaw Nation of Oklahoma	C5	SW	013
Citizen Potawatomi Nation	P2	SW	014
Colorado	CO	MP	015
Commonwealth of the Northern Mariana Islands	C7	W	016
Connecticut	CT	NE	017
Delaware	DE	MA	018
Eastern Band of Cherokee Indians (NC)	C1	SE	008
Eastern Shoshone	E2	MP	020
Eight Northern Indian Pueblo Council	E1	SW	021
Five Sandoval Indian Pueblos	F1	SW	022
Florida	FL	SE	023
Georgia	GA	SE	024
Guam	GU	W	025
Hawaii	HI	W	026
Idaho	ID	W	027
Illinois	IL	MW	028

WIC State Agency	State Identifier Code	FNS Region	WIC Authority ID
Indian Township	I1	NE	030
Indiana	IN	MW	029
Inter-Tribal Council Arizona (ITCA)	I4	W	031
Inter-Tribal Council Nevada (ITCN)	I5	W	032
Inter-Tribal Council of Oklahoma	I2	SW	033
Iowa	IA	MP	034
Kansas	KS	MP	035
Kentucky	KY	SE	036
Louisiana	LA	SW	037
Maine	ME	NE	038
Maryland	MD	MA	039
Massachusetts	MA	NE	040
Michigan	MI	MW	041
Minnesota	MN	MW	042
Mississippi	MS	SE	043
Mississippi Band of Choctaw Indians	C6	SE	012
Missouri	MO	MP	044
Montana	MT	MP	045
Muscogee Creek Nation	M2	SW	046
Navajo Nation	N2	W	047
Nebraska	NE	MP	048
Nevada	NV	W	049
New Hampshire	NH	NE	050
New Jersey	NJ	MA	051
New Mexico	NM	SW	052
New York	NY	NE	053
North Carolina	NC	SE	054
North Dakota	ND	MP	055
Northern Arapaho	N1	MP	056
Ohio	OH	MW	057
Oklahoma	OK	SW	058
Omaha/Santee Sioux	S7	MP	060

WIC State Agency	State Identifier Code	FNS Region	WIC Authority ID
Oregon	OR	W	059
Osage Nation Tribal Council	O1	SW	061
Otoe-Missouria Tribe	O2	SW	062
Pennsylvania	PA	MA	063
Pleasant Point	P1	NE	064
Pueblo of Isleta	I3	SW	065
Pueblo of San Felipe	S3	SW	066
Pueblo of Zuni	Z1	SW	067
Puerto Rico	PR	MA	068
Reserved for future use	S4		
Reserved for future use	S5		
Rhode Island	RI	NE	070
Rosebud Sioux Tribe	R2	MP	069
Santee Sioux Nation	S7	MP	071
Santo Domingo Tribe	S1	SW	072
Seneca Nation	S2	NE	073
South Carolina	SC	SE	074
South Dakota	SD	MP	075
Standing Rock Sioux Tribe	S6	MP	076
Tennessee	TN	SE	077
Texas	TX	SW	078
Three Affiliated Tribe	T1	MP	079
Utah	UT	MP	080
Ute Mountain Ute Tribe	U1	MP	081
Vermont	VT	NE	082
Virgin Islands	VI	MA	084
Virginia	VA	MA	083
Washington	WA	W	085
Washington, District of Columbia	DC	MA	019
West Virginia	WV	MA	087
Wichita, Caddo, and Delaware Tribes (WCD) Enterprises	W1	SW	086
Winnebago Tribe	W2	MP	088

WIC State Agency	State Identifier Code	FNS Region	WIC Authority ID
Wisconsin	WI	MW	089
Wyoming	WY	MP	090

Annex B– X9.93:2008 Updates

This Annex lists some of the changes to be submitted to the X9 AB11 Working group to update the X9.93 Part 1 Messages and X.93 Part 2 Files standards. The Technical Implementation Guide shall be used as a reference in identifying all corresponding changes to the X9.93:2008 standards.

B.1 Part 1 – Messages

The following changes have been identified for the X9.93:2008 Part 1 - Messages standard. Users of the standard for WIC Online EBT shall incorporate these changes.

- a) Parts 1 and 2, 4.1 Table 1, Representation abbreviations, “xn” values shall be “C” and “D” not lowercase.
- b) Part 1, Clause 2, update references to current names.
- c) Part 1, Clause 4.2, add “IFPS” for International Federation for Produce Standards.
- d) Part 1, Clause 6.1, add definitions and notes for “EF” dataset identifier, *Earliest benefit expiration date* and its sub-elements and that it is mandatory echo in 110 authorization or verification response messages or 210 financial presentment response messages when the action code = “000” (approved). Also, representation is “n 13” as data element includes a length and dataset identifier.
- e) Part 1, Clause 6.2.12, Table 3, WIC prescription food item, agreed that bits 3, 4, 7 and 11 shall be mandatory in the “PS” WIC prescription food item. Update and expand dataset identifier tables to show usage (mandatory, conditional) for each message type where used.
- f) Part 1, Clause 6.2.13, add *UPC/PLU check digit* to all UPC and PLU sub-elements in the *UPC/PLU data* data element.
- g) Part 1, Clause 6.2.16, Table 4, EBT file update response data and Annex C.9, update “ED” data set identifier description and expand dataset identifier tables to show usage (mandatory, conditional) for each message type where used.
- h) Part 1, Clause 6.2.17, Table 5, EBT balance information, correct to only allow EA in bit 62.
- i) Part 1, Clause 6.2.17, Table 5, EBT balance information, insert dataset bit “10” in “EA” dataset identifier description and leave it as “reserved for national use” with no representation or length.
- j) Part 1, Clause 7.2 and 7.2.1, add clarification that 100/110 and 200/210 messages are standard message sets for WIC EBT.
- k) Part 1, Clause 8.3.4, Table 13, Financial Presentment mandatory and conditional data elements, delete *message reason code* and *amounts, original* as a required data element in message.

- l) Part 1, Clause 8.5.3, Table 19, Reversal mandatory and conditional data elements, add condition for *EBT data* (bit 62) stating that a reversal advice (420) shall contain it from the original financial presentment message if available.
- m) Part 1, Clause 8.5.3, Table 19, Reversal mandatory and conditional data elements, add condition. A reversal advice (420) must contain EBT data (bit 62) from the original financial presentment message if available.
- n) Part 1, Clause 8.7.4 Table 23, Network Management mandatory and conditional data elements, remove as mandatory or conditional in 8xx messages.
- o) Part 1, Clause 8.7.4, Table 23, Network Management mandatory and conditional data elements, remove *transport data* (bit 59) as required data element in message.
- p) Part 1, Clause, 8.7.4, Table 23, Network Management mandatory and conditional data elements, add "ME" to bit 11, *systems trace audit number* for 810/812/814 message.
- q) Part 1, Clause 8.7.4, Table 23, Network Management mandatory and conditional data elements, add "ME" to bits 7, 11, 12, 24 and 25 in the 810/812/814 messages.
- r) Part 1, Annex B, change to a Normative annex, not an Informative one.
- s) Part 1, B.13, Table B.14, Item action codes, add *Item action code* values of "26 - Approved for a lower price due to NTE price exceeded" and "27 - Approved for a lower price due to NTE price exceeded and approved for less units than originally requested due to insufficient units" to dataset bit 8, *item action code*, in WIC Prescription food item (bit 62, dataset identifier "PS") and dataset bit 20, *item action code* in EBT file update response data (bit 62, dataset identifier "ED").
- t) Part 1, Annex B, Clause B.15, add state identifier values to WIC Authority ID table.
- u) Part 1, correct data element name "system trace audit number" to "systems" trace audit number".
- v) Part 1, change "Cash Value Voucher" to "Cash Value Benefit".
- w) Part 1, correct representation of data element *amount type*, *amounts additional* to "an 2".
- x) Part 1, correct representation of data elements *item price* and *original item price* to "n 6" and format to "9(4)v99".

B.2 Part 2 – Files

The following changes have been identified for the X9.93:2008 Part 2 – Files standard. Users of the standard for WIC Online and Smart Card EBT shall incorporate these changes.

- a) Part 2, Clause 6, Table 2, Data element directory, add the format of *item price* is "9(4)v99)".
- b) Part 2, Clause 6, Table 2, Data element directory, add definition of *state identifier* and add list of values to Annex A.

- c) Part 2, Clause 6, Table 2, Data element directory, change, *Date and time, transmission* to “MMDDhhmmss” from “YYMMDDhhmmss”; to conform to the ISO 8583 standard.
- d) Part 2, Clause 6.4 add check digit to all UPC and PLU data elements.
- e) Part 2, Clause C.2.1, Table C.1, WIC auto-reconciliation header record, and Table C.15, WIC hot list trailer record, correct value of *file format version*, to “04” instead of “03”.
- f) Part 2, Clause C.2.6, Table C.6, WIC auto-reconciliation trailer record, add note to *amount discount, total* that the absolute value of the individual discount amounts is used.
- g) Part 2, Clause C.5.1, Table C.16, WIC UPC/PLU header record, update format of *state identifier* to “an 2” add reference to table in Annex A.
- h) Part 2, Clause C.5.2, Table C.17 WIC UPC/PLU detail record, add *manual voucher indicator* to end of UPC/PLU detail record, pic 9(1) and to Clause 6, Table 2, Data element directory and Annex A, List of data elements.
- i) Part 2, Clause C.5.3, Table C.18, WIC UPC/PLU abbreviated detail record and Clause 6 Table 1 and Annex A; update to add data element *benefit unit description* to the D6 record, used for the description of sub-categories with a purchase indicator value of “1”.
- j) Part 2, correct data element name “system trace audit number” to “systems” trace audit number”.