

# WIC EBT

## Technical Implementation Guide

### 2018 Version

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.

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## 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.
2011	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) File Features, Structural Content, and Data Mapping for Development Consideration, Version 2.1, March 2011. Incorporates the Proposal for Smartcard WIC EBT Implementation of Split Tender and Benefit Reversal Functionality, June 2011, Version 1.0 (pending final FNS review). Reflects updates from FNS review and comments.
2012	3/9/2012	Reflects updates based on comments received on 2011 version.
2012	9/30/2012	Reflects updates incorporating bulletins published since version dated 3/9/2012.
2016 draft	8/02/2016	Reflects updates incorporating bulletins published since 9/30/2012 version, alignment with X9.93:2014 standards and other changes listed.
2018	2/26/2018	Reflects changes incorporating V4 smart card WIC clarifications, corrections and updates. Updates A.9 WIC State Agency Identifiers, including new 8-digit IINs. Incorporates CR#383 Subcategory straddle for Smartcard WIC EBT – Category 19 items only.

## Changes in the 2018 version

The Technical Implementation Guide 2018 version has been aligned with the X9.93:2014 standard.

The Technical Implementation Guide 2012 version listed changes to be made to the X9.93 standard. Those changes were incorporated in the X9.93:2014 versions of the standards. References in the Technical Implementation Guide 2018 version to these changes have consequently been removed or updated throughout the document.

The changes in Annex E of X9.93-1 and X9.93-2 identify the significant differences between the 2008 and 2014 versions of the X9.93 standards. These changes were reviewed and are incorporated into the Technical Implementation Guide in this version. A list of these changes is documented in Bulletin T-019.

In addition, the following Bulletins published since the Technical Implementation Guide 2012 version have been included as identified below:

- a) T-025 2016 08 02 Update to WIC EBT Error Identifier Codes – Table 47.
- b) T-024 2015 06 11 Updates to Message Reason Codes, published 6/11/2015 at Section A.5 Table 51.
- c) T-023 2015 04 14 Updates to Benefit Reversal Error Identifier Codes, published 4/14/2015 at Section A.1 .
- d) T-022 2015 04 09 WIC Vendor reporting of Smart Card Benefit Ending Balance, published 4/9/2015 at Section 12.1, Table 46.
- e) T-020 2015 02 02 WIC State Agencies to Exclude from End to End Encryption, published 2/2/2015 at Section A.9 .
- f) T-019 2015 01 06 Technical Implementation Guide and X9.93 alignment, published 1/6/2015 as indicated in bulletin.
- g) T-018 2016 07 11 WIC Smart Card Split Tender and Benefit Reversal Processing, published 7/11/2016 at Sections 12.3, 12.4, A.2 and 11.2.9
- h) T-017 2014 04 15 Standardized Card Reader Messages for WIC Smart Card EBT, published 4/15/2014 at Section 9.1.
- i) T-016 2013 10 28 WIC Auto-reconciliation file update - Sub-cat straddle reporting, published 10/28/2013 at Section 10.7.1.3.
- j) T-015 2013 07 26 Integrated circuit card system related data, published 7/26/2013 at Sections 10.7.6, 10.6 and A.2 and subsequently updated by T-018.
- k) T-014 U-005 2013 06 12 Hot Card List message reason codes and Universal Interface reason codes, published 6/12/2013 at Section A.5
- l) T-013 2013 04 04 Claim file record layout updates, published 4/4/2013 at Section 0.
- m) T-012 2013 04 16 Creating the Authorized Product List - Use of the Purchase Indicator, published 4/16/2013 at Section 10.7.1.
- n) T-010 2012 10 12 Use of Security related control information for DUKPT encryption, published 10/12/2012 at Section 6.1.
- o) T-009 2012 11 15 WIC tender for zero amount and tax implications, published 11/15/2012 at Section 8.3.2 and 0.
- p) T-008 2012 07 27 WIC EBT Food item abbreviations, published 10/11/2012 at Section A.8
- q) T-007 2012 10 30 Reporting WIC Redemptions, published 10/30/2012 at Section 12.1.
- r) T-006 2012 08 09 Updates to WIC file formats, published 8/9/2012 at Section 11.5.4, 10.6 and **Error! Reference source not found..**
- s) T-004 2012 08 09 WIC Code Value Updates, published 9/19/2012 at Sections A.5 11.6.2 and A.12
- t) T-002 2013 01 25 Handling declined and partially approved WIC transactions at the POS, published 1/25/2013 at Section 8.3.5 and 8.3.1.

- u) Clarified submittal requirements for NUPC in 12.2.
- v) 8.5.1 Added clarification to ensure any return complies with allowable situations per FNS policy.
- w) 12.3 WIC Split Tender Processing – clarified language for consistency with FNS policy. No technical change.
- x) 8.3.2 Discounts and coupon information. Clarifying language added for line item discounts and CVB items.
- y) 9.2 added new section to clarify smart card handling of coupons and discounts.
- z) 9.3 add new section to clarify smart card handling of surcharges information.
- aa) 10.7.1.3 Sub-Category straddle. Added ability for smart card EBT to handle Sub-Category straddle for Cash Value Benefits in Category 19.

V4 updates are listed below.

- a) 10.4 File Errors - File errors are only sent in response to the three claim file types – Single Claim, Transaction Claim and Aggregate Claim files. Action: Deleted other file types for file errors.
- b) Updated Message Reason codes from CR#383. Modified text for codes 5653 and 5698 in A.5 .
- c) Updated A.15 Unit of Measure to allow use of A.8 Benefit Unit Description in the UOM field throughout the TIG. This change also updated notes for each UOM reference in each file or message record.
- d) Various edits, corrections and note on file element usage added to files used in smart card EBT systems – Claims, Auto Reconciliation, Acknowledgement, and UPC/PLU files.
- e) 0 and 11.1.6. The super header/trailer records are now only required if using the Aggregate Claim file. A Transaction Claim file no longer requires super header/trailer records.
- f) 11.1.4. Added Line Item Discount to E3 Claim Addenda record as WIC vendor option. WIC claim file addenda record (“E3”) to allow vendor option in smart cards to submit individual discount amounts instead of netting a discount or aggregating discount. This only applies to WIC smart card EBT.
- g) 11.2.6 WIC auto-reconciliation adjustment record. D5 records shall be placed prior to the super trailer record in Aggregate Claim file ARFs.
- h) 11.2.8 Auto-reconciliation super trailer record – corrected missing X9.93-2, 2014 fields (Total Settlement Amount, Date Settlement and Amount, discount total).
- i) 11.5.5. At State agency option, an acknowledgement file will be returned for a Claim Submission file or Claim Extraction file only if an E5 or D7 record is reported. There will be one acknowledgement file per extraction file if the claim submission file was accepted. See 11.5.
- j) A.1 Error Identification codes (D7 and E5 records) have been updated for File, Transaction, and Extraction Section levels. File level warning error identification codes (range 3000-3999) were deleted – no longer used.
- k) A.9 . Additional updates were also added to Table 55 State identifier codes and WIC Authority IDs for newly issued Issuer Identification Numbers for several State agencies. This also includes 8-digit IIN’s.
- l) 10.6 WIC EBT Files data element directory. Most Smart Card EBT State agencies zero fill the File Sequence Number for files transmitted to WIC authorized vendors.
- m) A.14 Added 1230 for purchase and 1430 for reversal for message type in all applicable files.

**Note:** Bulletins T-001, T-003 and T-011 were superseded and therefore not listed; Bulletin T-005 addressing Manual Vouchers was not released.



## WIC EBT – Technical Implementation Guide

X9.93 Part 1 Messages is intended for use by any Electronic Benefit Transfer (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 from the X9.93 2014 versions. For an overview of the WIC EBT Program, refer to the WIC Operating Rules. Users of prior versions of this document are expected to comply with this version with all new implementations and upgrades of existing implementations within two (2) years of the publication date.

### 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 Sections 10 through 12. Any restrictions, clarifications, and/or additional requirements are described.

A list of the specific changes to this version is included. These changes shall be incorporated in WIC Online and Smart Card EBT implementations. Users of the Technical Implementation Guide shall reference the X9.93:2014 standards in developing their implementations.

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. See Section 7 for further details.

### 2 References

*ANS X9.93:2014 Financial transaction messages – Electronic benefits transfer (EBT) – Part 1: Messages* is referred to as “X9.93-1” and “X9.93 Part 1 Messages” in this document.

*ANS X9.93:2014 Financial transaction messages – Electronic benefits transfer (EBT) – Part 2: Files* is referred to as “X9.93-2” and “X9.93 Part 2 Files” in this document.

*ANS X9.131-2015 Financial transaction messages - Electronic benefits transfer (EBT) - WIC retailer interface* is referred to as “X9.131” in this document.

*Operating Rules – Women, Infants and Children (WIC) – Electronic benefits transfer (EBT)* dated September 2014 is referred to as “WIC Operating Rules” in this document.

### **3 Terms and definitions**

ISO 8583 and the X9.93 standards and the WIC Operating Rules contain terms and definitions used in this document. The following additional clarifications are noted in this section.

Acquirer in WIC EBT refers to the entity which acquires from the WIC Vendor the data relating to the transaction and initiates that data into an interchange system; it may be the WIC Vendor or a third party processor used by the WIC Vendor. In WIC smartcard EBT, the Acquirer acts as another level of proxy for file exchange who compiles transactions into a file that is passed to the forwarder for submission to the WIC State Agency. If the file is submitted directly by the vendor, the acquiring institution ID assigned by the State agency may be the same as the merchant ID.

Card Issuer in WIC EBT is the WIC State Agency (or its agent) which issues the WIC EBT Card to the WIC cardholder. They may use a WIC EBT Card Issuer Processor to perform processing of WIC EBT transactions submitted by the Acquirer.

Card Acceptor in WIC EBT is the WIC Vendor accepting the card and presenting transaction data to an Acquirer.

Forwarding institution is an entity forwarding the request or advice message in a WIC EBT data interchange system. The Forwarding Institution is assigned a unique ID by each WIC State Agency. In smart card WIC EBT, the merchant ID may be the same as the forwarding institution ID in claim file submissions

Receiving institution is the entity identified in an online message or in a claim submission file or auto-reconciliation file identified by the sending institution.

### **4 Symbols (and abbreviated terms)**

The symbols and abbreviated terms in the ISO 8583 and X9.93 standards are to be used in the implementations of WIC EBT. 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 “5”, identifying the version of the standard being followed as “X9.93 2014”. This means that WIC EBT messages shall begin with “5200” for the Financial Presentment (purchase) request messages, for example.
- c) Data exchanged in messages shall be represented in any of the following manners:
  - ASCII alphanumeric characters
  - Unpacked numeric data
  - 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 identifier* 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.

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

Bit	Data Element	Message used in										Format	Representation	Usage notes
		Balance Inquiry 100/110		Purchase / Store & Forward or Voucher Clear 200/210		File Action 304/314		Reversal or Void 420/430		Network Management 800/810 or 804/814				
n/a	Version number	M	M	M	M	M	M	M	M	M	M		n 1	See A.14
n/a	Message type identifier (MTI)	100	110	200	210	304	314	420	430	800 804	810 814		n 3	See 7.1.1.
n/a	Bit map, primary	M	M	M	M	M	M	M	M	M	M		b 8	
1	Bit map, secondary					M				M	M		b 8	
2	Primary account number (PAN)	M	ME	M	ME			ME	ME			LLVAR	n.19	
3	Processing code	M	ME	M	ME			ME	ME				an 6	319700 for balance inquiry; 309700 for purchase balance inquiry and 009700 for purchase or reversal. See A.12
3-1	Transaction type code	M	ME	M	ME			ME	ME				n 2	31 participant balance inquiry, 30 for purchase balance inquiry, 00 for purchase or reversal
3-2	Account type code 1	M	ME	M	ME			ME	ME				an 2	97 for balance inquiry or purchase or reversal; see X9.93-1 Clause B.1 for values.
3-3	Account type code 2	M	ME	M	ME			ME	ME				an 2	00 for balance inquiry or purchase or reversal; see X9.93-1 Clause B.1 for values.
4	Amount, transaction			M	ME			ME	ME				n 12	The amount reversed in 420; partial reversals not allowed; echoed from 420 in 430. Includes surcharges that are incorporated in the Item price, see 8.3.3 and 11.2.9.

Table 1 WIC Online EBT messages data element requirements

Bit	Data Element	Message used in										Format	Representation	Usage notes	
		Balance Inquiry 100/110		Purchase / Store & Forward or Voucher Clear 200/210		File Action 304/314		Reversal or Void 420/430		Network Management 800/810 or 804/814					
5	Amount, settlement (reconciliation)				C									N 12	Mandatory if approved or partially approved; contains approved amount and is called "Amount, settlement" in WIC Online EBT processing.
7	Date and time, transmission	M	M	M	M	M	M	M	M	M	M	MMDDhhmmss	n 10	in GMT	
11	Systems trace audit number	M	ME	M	ME	M	ME	M	ME	M	ME		n 6		
12	Date and time, local transaction	M	ME	M	ME	M	ME	M	ME	M	ME	YYMMDDhhmmss	n 12	expressed in local time of sender	
14	Date, expiration	C	CE	C	CE			CE	CE			YYMM	n 4	As on the card, mandatory in 100 or 200 if Track 2 data (bit 35) 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	
15	Date, settlement				C				M			YYMMDD	n 6	Mandatory for 210 if transaction is approved or for a partially approved store & forward	
22	Point of service data code	M	ME	M	ME			M					an 12		
22-1	Card data input capability	M	ME	M	ME			M					an 1	Expected values are "2" - magnetic stripe read or "6" key entered	
22-2	Cardholder authentication capability	M	ME	M	ME			M					an 1	Expected value is "1" - PIN	

Table 1 WIC Online EBT messages data element requirements

Bit	Data Element	Message used in										Format	Representation	Usage notes
		Balance Inquiry 100/110		Purchase / Store & Forward or Voucher Clear 200/210		File Action 304/314		Reversal or Void 420/430		Network Management 800/810 or 804/814				
22-3	Card capture capability	M	ME	M	ME			M					an 1	Expected values are "0" – none or "1" - capture
22-4	Operating environment	M	ME	M	ME			M					an 1	Expected values are "1" – on premises of Card acceptor, attended or "2" – on premises of Card acceptor, unattended for self-checkout
22-5	Cardholder present	M	ME	M	ME			M					an 1	"0" – cardholder present
22-6	Card present	M	ME	M	ME			M					an 1	"1" – card present
22-7	Card data input mode	M	ME	M	ME			M					an 1	Expected values are "2" – magnetic stripe read or "6" – key entered
22-8	Cardholder authentication method	M	ME	M	ME			M					an 1	Expected value "1" - PIN
22-9	Cardholder authentication entity	M	ME	M	ME			M					an 1	Expected value "3" – Authorizing agent
22-10	Card data output capability	M	ME	M	ME			M					an 1	Expected values are "0" – unknown or "1" - none
22-11	Terminal output capability	M	ME	M	ME			M					an 1	Expected values are "0" – unknown, "1" – none, "2" – printing, "3" – display, "4" – printing and display
22-12	PIN capture capability	M	ME	M	ME			M					an 1	Expected values are "1" – device PIN capture capability unknown, "4" – 4 characters or "5" – 5 characters

Table 1 WIC Online EBT messages data element requirements

Bit	Data Element	Message used in										Format	Representation	Usage notes
		Balance Inquiry 100/110		Purchase / Store & Forward or Voucher Clear 200/210		File Action 304/314		Reversal or Void 420/430		Network Management 800/810 or 804/814				
24	Function code	M		M		M	ME	M		M	ME		n 3	"108" or "160" in balance inquiry; "200" in purchase; "203" or "208" in store and forward, "400" in reversals/voids; "801", "802", "811", or "831" in network management
25	Message reason code							M			C		n 4	Value is "4000" for a void; see A.5 for other values.
26	Merchant category code	M		M				ME					n 4	
30	Amounts, original							M					n 24	
30-1	Original amount, transaction							M					n 12	
30-2	Original amount, reconciliation							M					n 12	
32	Acquiring institution identification code	M	ME	M	ME	M	ME	M	ME			LLVAR	n...11	In 420 reversal advice, may be different than 200 request when 420 is generated by a different party
33	Forwarding institution identification code	C	CE	C	CE			C	CE			LLVAR	n...11	Mandatory when not the same as originating institution.
35	Track 2 data	C	CE	C	CE			CE	CE			LLVAR	z...37	Mandatory if track data was read at the POS in 100/200; echoed in 420 if present in request. See 0
37	Retrieval reference number	M	ME	M	ME			M	ME				an 12	WIC Online EBT does not format the sub-elements of Retrieval reference number as specified in X9.93. Value set by the transaction originator

Table 1 WIC Online EBT messages data element requirements

Bit	Data Element	Message used in										Format	Representation	Usage notes
		Balance Inquiry 100/110		Purchase / Store & Forward or Voucher Clear 200/210		File Action 304/314		Reversal or Void 420/430		Network Management 800/810 or 804/814				
38	Approval code		C		C			CE					an 6	Mandatory if accepted/approved Mandatory echo from 210 in 420, if 210 received, or if a void
39	Action code		M		M		M		M		M		an 3	See X9.93 Part 1 for values
41	Card acceptor terminal identification	M	ME	M	ME	C	CE	ME					an 8	Mandatory if required by the WIC authority in 304 message
42	Card acceptor identification code	M	ME	M	ME			ME					an 15	
43	Card acceptor name/location	M	ME	M	ME			ME				LLVAR	ans...99	
43-1	Card acceptor name/street/city	M	ME	M	ME			ME					ans...83	
43-2	Card acceptor postal code	M	ME	M	ME			ME				LLVAR	ans 10	
43-3	Card acceptor region	M	ME	M	ME			ME					ans 3	Region, state or province
43-4	Card acceptor country code	M	ME	M	ME			ME					ans 3	See ISO 3166 for values
44	Additional response data		C		C				C			LLVAR	an...25	Mandatory if Action code is "307" – format error; see 7.1.4 and X9.93-1 Section 7.1.3 on Error processing. WIC Online EBT does not use the phone number option. Value set by the responding party.

Table 1 WIC Online EBT messages data element requirements

Bit	Data Element	Message used in										Format	Representation	Usage notes
		Balance Inquiry 100/110		Purchase / Store & Forward or Voucher Clear 200/210		File Action 304/314		Reversal or Void 420/430		Network Management 800/810 or 804/814				
48	Additional data, private	M	ME	M	ME	M	ME	ME				LLLVAR	ans...255	For file updates, contains the WIC merchant ID (dataset identifier "WN") and Benefit issuing entity (WIC authority ID or State, dataset identifier "IS")
48-1	Additional data dataset identifier	M	ME	M	ME	M	ME	ME					a 2	
48-2	Additional data length	M	ME	M	ME	M	ME	ME					n 3	
48-3	Additional data information	M	ME	M	ME	M	ME	ME					ansb...250	
48-IS	Benefit issuing entity					M							an 15	WIC authority ID or state
48-VN	Voucher number			C	CE			CE					an 15	Mandatory if voucher clear transaction; see 8.3.6
48-WN	WIC merchant ID	M	ME	M	ME	M	ME	ME	ME				an 12	
49	Currency code, transaction			M	ME			ME					n 3	Always "840" = USD
52	Personal identification number (PIN) data	M		C									b 8	Triple DES (DES3) encryption is minimum required method; end to end encryption may be used if utilized by the WIC Vendor and their Acquirer, see 0. Mandatory in 200 except for voucher clear transactions.
53	Security related control information	C	CE	C	CE			CE						Mandatory if using DUKPT encryption

Table 1 WIC Online EBT messages data element requirements

Bit	Data Element	Message used in										Format	Representation	Usage notes
		Balance Inquiry 100/110		Purchase / Store & Forward or Voucher Clear 200/210		File Action 304/314		Reversal or Void 420/430		Network Management 800/810 or 804/814				
54	Amounts, additional			C	CE			CE				LLVAR	ans...120	Mandatory if coupon/discount amounts are present in 200 Mandatory, echoed in 420 if present in 200
54-1	Account type code, amounts additional			C	CE			CE					an 2	See X9.93-1 Clause B.1 for values.
54-2	Amount type code, amounts additional			C	CE			CE					an 2	See X9.93-1 Clause B.4 for values.
54-3	Currency code, amounts additional			C	CE			CE					n 3	Always ""840" = USD
54-4	Amount, amounts additional			C	CE			CE					xn 12	Contains the total discount amount; "x" = "C" for credit" or "D" for debit; see 8.3.2.
56	Original data elements							M	ME			LLVAR	n...42	
56-1	Original message type							M	ME				n 4	
56-2	Original systems trace audit number							M	ME				n 6	
56-3	Original date and time, local transaction							M	ME			YYMMDDhhmmss	n 12	As was set by the originator of the transaction

Table 1 WIC Online EBT messages data element requirements

Bit	Data Element	Message used in										Format	Representation	Usage notes
		Balance Inquiry 100/110		Purchase / Store & Forward or Voucher Clear 200/210		File Action 304/314		Reversal or Void 420/430		Network Management 800/810 or 804/814				
56-4	Original acquiring institution identification code							M	ME			LLVAR	n...11	
59	Transport data		C		C		C		C		C	LLLVAR	ansb...999	Mandatory in 110, 210 ,314, 430 and 8xx responses if additional information to be provided in the response
60	EBT data		C	C	C		C					LLLVAR	ansb...999	Contains overflow data from bit 61
61	EBT data		C	C	C		C					LLLVAR	ansb...999	Contains overflow data from bit 62
62	EBT data		C	M	C	M	M					LLLVAR	ansb...999	See specific dataset types for usage
62-1	EBT data dataset identifier		C	M	C	M	M						an 2	Mandatory if transaction is accepted/approved in 110/210
62-2	EBT data length		C	M	C	M	M						n 3	Mandatory if transaction is accepted/approved in 110/210
62-3	EBT data information		C	M	C	M	M						ansb...994	Mandatory if transaction is accepted/approved in 110/210; contains the data indicated by the dataset identifier value
62-EA	EBT balance information		C		C									Mandatory if transaction is accepted/approved See 6.2.3
n/a	EBT balance information bit map		C		C								b 4	Mandatory if transaction is approved ; dataset bit map value is "1420" (0001010000100000)
62-EA-1	Continuation bit												b 1	
62-EA-2	UPC/PLU data												n 17	
62-EA-2-1	UPC/PLU indicator												n 1	

Table 1 WIC Online EBT messages data element requirements

Bit	Data Element	Message used in										Format	Representation	Usage notes
		Balance Inquiry 100/110		Purchase / Store & Forward or Voucher Clear 200/210		File Action 304/314		Reversal or Void 420/430		Network Management 800/810 or 804/814				
62-EA-2-2	Universal Product Code (UPC)												n 15	
62-EA-2-2	Price look-up (PLU)												n 15	
62-EA-2-3	UPC/PLU check digit												n 1	
62-EA-3	Item description												ans 50	Only use printable characters in A.11
62-EA-4	Category code		C		C								n 2	Mandatory if transaction is accepted/approved
62-EA-5	Category description												ans 50	Only the first 20 characters are significant
62-EA-6	Sub-Category code		C		C								n 3	Mandatory if transaction is accepted/approved
62-EA-7	Sub-Category description												ans 50	Only first 24 characters are significant
62-EA-8	Unit of measure												an 10	see A.8 or A.15 for values
62-EA-9	Package size												n 5	
62-EA-10	Reserved												n/a	Reserved bit for future use
62-EA-11	Benefit quantity		C		C								n 5	Mandatory if transaction is accepted/approved
62-EA-12	Benefit unit description												ans 50	See A.8 for values
62-EA-13	UPC/PLU data length												n 2	
62-EA-14 through 16	Reserved												n/a	Reserved bits for future use

Table 1 WIC Online EBT messages data element requirements

Bit	Data Element	Message used in										Format	Representation	Usage notes
		Balance Inquiry 100/110		Purchase / Store & Forward or Voucher Clear 200/210		File Action 304/314		Reversal or Void 420/430		Network Management 800/810 or 804/814				
62-EC	EBT file update request data					M						LLVAR	an...33	
62-EC-1	Update GMT start date and time					M						CCYMMDD hhmmss	n 14	See 8.4.1, in GMT
62-EC-2	EBT file update start record					M						LLVAR	an...17	See 8.4.1
62-ED	EBT file update response data						M					LLLVAR	ansb...999	See 8.4.2 for usage
62-ED-1	Continuation bit						C						b 1	
62-ED-2	UPC/PLU data						C						n 17	
62-ED-2-1	UPC/PLU indicator						C						n 1	
62-ED-2-2	Universal Product Code (UPC)						C						n 15	See 8.4.2
62-ED-2-2	Price look-up (PLU)						C						n 15	See 8.4.2
62-ED-2-3	UPC/PLU check digit						C						n 1	
62-ED-3	Item description						C						ans 50	See 8.4.2, Only use printable characters in A.11
62-ED-4	Category code						C						n 2	See 8.4.2
62-ED-5	Category description												ans 50	See 8.4.2
62-ED-6	Sub-Category code						C						n 3	See 8.4.2
62-ED-7	Sub-category description						C						ans 50	See 8.4.2; only first 24 characters are significant
62-ED-8	Unit of measure						C						an 10	See 8.4.2 and A.15 State agencies may use values from A.8

Table 1 WIC Online EBT messages data element requirements

Bit	Data Element	Message used in										Format	Representation	Usage notes	
		Balance Inquiry 100/110		Purchase / Store & Forward or Voucher Clear 200/210		File Action 304/314		Reversal or Void 420/430		Network Management 800/810 or 804/814					
62-ED-9	Package size												n 5		
62-ED-10	Benefit quantity						C						9(3)v99	n 5	See 8.4.2
62-ED-11	Benefit unit description													ans 50	
62-ED-12	Item price												9(4)v99	n 6	
62-ED-13	Price type													an 2	
62-ED-14	Date, effective												CCYYMMDD	n 8	as set by sender
62-ED-15	Date, end												CCYYMMDD	n 8	as set by sender
62-ED-16	Purchase indicator						C							n 1	See 8.4.2, A.6
62-ED-17	Continuation bit						C							b 1	See 8.4.2
62-ED-18	Weighted product indicator						C							n 1	See 8.4.2
62-ED-19	Manual voucher indicator						C							n 1	See 8.4.2 and A.4
62-ED-20	Item action code						M							n 2	See A.3
62-ED-21	UPC/PLU data length						C							n 2	See 6.2.2 and 8.4.2
62-EF	Earliest benefit expiration date		C		C									n 13	Mandatory if transaction is accepted/approved, see 6.2.4
62-EF-1	Earliest benefit expiration date dataset identifier		C		C									an 2	Mandatory if transaction is accepted/approved see 6.2.4

Table 1 WIC Online EBT messages data element requirements

Bit	Data Element	Message used in										Format	Representation	Usage notes
		Balance Inquiry 100/110		Purchase / Store & Forward or Voucher Clear 200/210		File Action 304/314		Reversal or Void 420/430		Network Management 800/810 or 804/814				
62-EF-2	Earliest benefit expiration date data length		C		C								n 3	Mandatory if transaction is accepted/approved length of Earliest benefit expiration date information, see 6.2.4
62-EF-3	Earliest benefit expiration date information		C		C							CCYYMMDD	n 8	Mandatory if transaction is accepted/approved, see 6.2.4
62-PS	WIC prescription food item			M	C							LLLVAR	ansb...999	See 6.2.5 for usage
n/a	WIC prescription food item bit map			M	C								b 2	200 is hex "4620", submitted as 2 bytes of binary data (0100011000100000). 210 values vary depending on data returned.
62-PS-1	Continuation bit												b 1	
62-PS-2	UPC/PLU data			M	C								n 17	See 6.2.2
62-PS-2-1	UPC/PLU indicator			M	C								n 1	See 6.2.2
62-PS-2-2	Universal Product Code (UPC)			C	C								n 15	Mandatory if UPC/PLU indicator = "0", right justified, zero-filled; See 6.2.2
62-PS-2-2	Price look-up (PLU)			C	C								n 15	Mandatory if UPC/PLU indicator = "1", right justified, zero-filled; See 6.2.2
62-PS-2-3	UPC/PLU check digit			M	C								n 1	Included in UPC/PLU data length; last position of UPC/PLU data; See 6.2.2
62-PS-3	Category code												n 2	
62-PS-4	Sub-Category code												n 3	

Table 1 WIC Online EBT messages data element requirements

Bit	Data Element	Message used in										Format	Representation	Usage notes
		Balance Inquiry 100/110		Purchase / Store & Forward or Voucher Clear 200/210		File Action 304/314		Reversal or Void 420/430		Network Management 800/810 or 804/814				
62-PS-5	Units											9(3)v99	n 5	
62-PS-6	Item price			M	C							9(4)v99	n 6	Mandatory in 210 if item in error or partially approved. The price of one unit of the item indicated by the UPC/PLU data; in 200 the shelf price; in 210 the approved price; for CVB items value is \$1.00 or 100 pennies (000100)
62-PS-7	Purchase quantity			M	C							9(3)v99	n 5	Mandatory in 210 if item in error or partially approved. In 200 requested quantity, in 210 the approved quantity; for CVB it is the price of the item in pennies
62-PS-8	Item action code				C								n 2	Mandatory in 210 if item in error or partially approved, see A.3
62-PS-9	Original item price				C							9(4)v99	n 6	Mandatory if Item price differs from Original item price, e.g., for an NTE price adjustment. CVB items value is \$1.00 or 100 pennies (000100)
62-PS-10	Original purchase quantity				C							9(3)v99	n 5	Mandatory if Purchase quantity differs from Original purchase quantity in 200 request, e.g. for a store and forward transaction.
62-PS-11	UPC/PLU data length			M	C								n 2	Mandatory in 210 if item in error or partially approved. See 6.2.2
62-PS-12 through 16	Reserved												n/a	Reserved bits for future use

Table 1 WIC Online EBT messages data element requirements

Bit	Data Element	Message used in										Format	Representation	Usage notes
		Balance Inquiry 100/110		Purchase / Store & Forward or Voucher Clear 200/210		File Action 304/314		Reversal or Void 420/430		Network Management 800/810 or 804/814				
93	Transaction destination institution identification code									M	ME	LLVAR	ans...11	
94	Transaction originator institution identification code									M	ME	LLVAR	ans...11	
96	Key management data									C	C	LLLVAR	b...999	Mandatory when function code = "811"; see 6.2.6.
101	File name					M	ME						ans 17	See A.13 for values

## 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, local transaction (bit 12) and Date, settlement (bit 15)

The data and time in the purchase transaction (200/210 messages) is provided by the POS as of the date and time at 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.

In WIC EBT files, *Date and time, local transaction* is 14 positions formatted as CCYYMMDDhhmmss and *Date, settlement* is 8 positions, formatted as CCYYMMDD.

### 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* element before calculating the check digit. The *UPC/PLU data* element is 17 positions. 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* element. The *UPC/PLU check digit* is calculated using the UPC-A check digit algorithm from GS1.

The *UPC/PLU data length* (62-PS-11, 62-ED-21 and 62-EA-13) indicates the number of significant digits in the *UPC/PLU data* element, including the check digit. The length value includes the check digit as a significant digit, e.g., 12, 13 or 14 digits for UPC-A, EAN or GTIN and check digit, 6 digits for 5-digit PLU and check digit, 5 digits for 4-digit PLU and check digit. UPC-E barcode data should be converted to their full length UPC equivalent for WIC EBT processing.

#### 6.2.2.1 Check Digit Calculation

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

- a) Multiply the odd numbered positions by three.
- b) Multiply the even numbered positions by one.
- c) Sum the results of Step 2 and Step 3.
- d) Subtract the sum from the nearest equal or higher multiple of ten. The difference represents the check sum digit.
- e) The positions are displayed below:

\* Assume PLU codes are 5 digits with 0 (zero) the leading digit for standard and 9 as leading digits for organic. Position N6 is the check sum digit.

For a PLU 04011 (bananas), the check digit is calculated as follows:

- a) Multiply 3 times 0, 0 and 1.  $3 \times 0 = 0$ ,  $3 \times 0 = 0$  and  $3 \times 1 = 3$ .
- b) Multiply 1 times 4, 0 and 1.  $1 \times 4 = 4$  and  $1 \times 1 = 1$ .
- c) Sum the results of steps 1 and 2.  $0 + 0 + 3 + 4 + 1 = 8$ .
- d) Subtract 8 from 10.  $10 - 8 = 2$ .

40112 is the PLU for bananas with a check digit of 2.

For organic banana PLU 94011, the check digit is calculated as follows:

- a) Multiply 3 times 9, 0 and 1.  $3 \times 9 = 27$ ,  $3 \times 0 = 0$  and  $3 \times 1 = 3$ .

- b) Multiply 1 times 4 and 1.  $1 \times 4 = 4$  and  $1 \times 1 = 1$ .
- c) Sum the results of steps 1 and 2.  $27 + 0 + 3 + 4 + 1 = 35$ .
- d) Subtract 26 from 40.  $40 - 35 = 5$

940115 is the PLU for organic bananas with a check digit of 5.

For a UPC-A barcode for tuna UPC "01111088808" (without a check digit) , the check digit is calculated as follows:

- a) Multiply 3 times 0, 1, 1, 1, 8, 8 and 8.  $3 \times 0 = 0$ ,  $3 \times 1 = 3$ ,  $3 \times 1 = 3$ ,  $3 \times 8 = 24$ ,  $3 \times 8 = 24$  and  $3 \times 8 = 24$ .
- b) Multiply 1 times 1, 1, 0, 8 and 0.  $1 \times 1 = 1$ ,  $1 \times 1 = 1$ ,  $1 \times 0 = 0$ ,  $1 \times 8 = 8$  and  $1 \times 0 = 0$ .
- c) Sum the results of steps 1 and 2.  $0 + 3 + 3 + 24 + 24 + 24 + 1 + 1 + 0 + 8 + 0 = 88$ .
- d) Subtract 88 from 90.  $90 - 88 = 2$ .

011110888082 is the UPC-A with a check digit of 2.

For example, a UPC-A barcode (in this case, a UPC for a can of tuna) of "01111088808X" where X is the check digit, X can be calculated by adding the odd-numbered positions ( $0+1+1+8+8+8 = 26$ ), multiplying by three ( $26 \times 3 = 78$ ), adding the even-numbered positions ( $78+1+1+0+8+0 = 88$ ), 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. The *EBT balance information* data element is a composite data element. It includes the *EBT balance information bit map*, containing 8 bits (2 bytes) represented as a 4-digit hexadecimal value in the message.

**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	Only use printable characters in A.11
4	Category code	C	C	n 2	Mandatory if transaction is accepted/approved
5	Category description			ans 50	Only the first 20 characters are significant
6	Sub-Category code	C	C	n 3	Mandatory if transaction is accepted/approved
7	Sub-category description			ans 50	Only the first 24 characters are significant
8	Unit of measure			an 10	See A.15 State agencies may use values from A.8 .
9	Package size			n 5	

10	Reserved for national use				
11	Benefit quantity	C	C	n 5	Mandatory if transaction is accepted/approved
12	Benefit unit description			ans 50	See A.8 for values
13	UPC/PLU data length			n 2	
14-16	Reserved				

Balance information on a cardholder’s prescription benefits may be provided as follows:

- a) Prior to or after the sale, the customer may determine the balance of their benefits by performing a balance inquiry. Balance inquiry is done with the 100/110 Verification request/response messages and is a separate transaction from any purchases. A 200/210 Financial presentment message pair shall not be used to perform a balance inquiry.
- b) During the sale, in order to provide the customer with the initial balance of their benefits, the retailer requests the benefit balance using a 100/110 Verification request/response message. At the completion of the sale, the remaining benefit balance is provided in the 210 Financial presentment response message from the Card issuer. This results in two message pairs (100/110 and 200/210) to complete the transaction.
- c) Balance information provided shall include benefits with zero balances and all balances shall be printed on the receipt, including zero balances. If all balances are zero, the message “NO WIC” shall be printed on the receipt.

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

In the Balance Inquiry response (110) message and the Financial Presentment response (210) message, the data element, *Earliest benefit expiration date* (bit 62-EF) is mandatory when the transaction is accepted or approved. It is returned to be printed on the receipt. It is a fixed length composite data element that does not utilize a bit map. It is made up of three sub-elements with an overall length of 13 positions and a length indicator of 3 positions. 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, (see EBT data dataset identifier)an 2, positions 1-2;
- b) Earliest benefit expiration date length, (see EBT data data length) n 3, positions 3-5;
- c) Earliest benefit expiration date information, n 8, positions 6-13, format “CCYYMMDD”.

For example if the earliest expiration date of any of the benefits issued to a WIC Participant was April 15, 2013, *Earliest benefit expiration date* would have a value of “EF00820130415”. Note that this dataset identifier shall only be used in bit 62 or 60, 61.

If there are multiple expiration dates in a prescription, only the earliest expiration date shall be sent. Additional optional sub-elements may be added in the future to identify multiple expiration dates for food benefits.

**6.2.5 EBT data (dataset identifier “PS”) additional requirements**

*EBT data* (bit 62-PS) in the Financial Presentment request (200) message contains the requested food items. For a Financial Presentment response (210) message, an approved purchase contains partially approved (NTE adjusted) *WIC prescription food items* only in bit 62-PS, if any. For a denied purchase, bit 62-PS contains prescription food items in error, if applicable, with the *Item price* (62-PS-6) and *Purchase quantity* (62-PS-7) set to zero. For a transaction denied because greater than the allowable number of food items which can be processed are requested (*Action code* value is “121 – exceeds withdrawal amount limit”) no data is returned in bit 62-PS.

For a store and forward Financial Presentment (210) message, an approved purchase will additionally contain any rejected *WIC prescription food items* in bit 62-PS.

A reversal advice (420) message is recommended to contain the *EBT data* (bit 62) from the original financial presentment transaction (200 or 210) messages if available.

Transactions may be split into multiple Financial Presentment request messages by the WIC Vendor to accommodate message size restrictions in bits 60, 61 and 62. If a transaction is split into multiple messages because the data exceeds the maximum length of *EBT data* (bits 60, 61 and 62 using the PS dataset identifier), each message shall be identified uniquely, i.e., shall be assigned its own *Systems trace audit number*. A data element shall not be split across bits and instead shall be moved to the next overflow bit.

### **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 Triple DES (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.

**6.2.7 Personal identification number (PIN) data and Track data**

The Personal identification number (PIN) data and the full contents of Track 1 data or Track 2 data (from the magnetic stripe located on the back of a card, equivalent data contained on a chip, or elsewhere) should not be stored, except for store and forward processing requirements, by the WIC Vendor or their Acquirer in such a manner as to allow for the reconstruction of the PIN or full contents of the track.

**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 messages.

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

**7.1.1 Mandatory WIC Online EBT transaction types**

The following *Message type identifiers* 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 type identifiers* (e.g., 220/230) may be used for closed loop EBT Card Acceptor Devices (CADs) that are connected to an Acquirer. The format and use of these other *Message type identifiers* are not addressed in this Technical Implementation Guide except in smart card files where 230 is utilized; see Table 60.

**Table 3 WIC Online EBT mandatory and optional transaction set**

Transaction type	Mandatory message type identifiers								Optional message type identifiers		
	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							
Voucher clear (previously authorized), see			x	x	x	x					
Reversals					x	x					
Void					x	x					
Network management							x	x			
UPC/PLU store file (APL) updates									x	x	
Error message notification											x

### **7.1.2 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.

### **7.1.3 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.

### **7.1.4 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. The *Additional response data* (bit 44) data element is not required in File Action or Network management response messages.

The *message error indicator* (bit 18) may be used in the response or advice response messages 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.

## **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 messages (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 messages are not used.

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

**Table 4 Verification messages mandatory and conditional data elements**

Bit	Verification messages Data element name	Message type identifiers	
		100	110
n/a	Message type ID	M	M
n/a	Bit map, primary	M	M
2	Primary account number (PAN)	M	ME
3	Processing code	M	ME
3-1	Transaction type code	M	ME
3-2	Account type code 1	M	ME
3-3	Account type code 2	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
22-1	Card data input capability	M	ME
22-2	Cardholder authentication capability	M	ME
22-3	Card capture capability	M	ME
22-4	Operating environment	M	ME
22-5	Cardholder present	M	ME
22-6	Card present	M	ME
22-7	Card data input mode	M	ME
22-8	Cardholder authentication method	M	ME
22-9	Cardholder authentication entity	M	ME
22-10	Card data output capability	M	ME
22-11	Terminal output capability	M	ME
22-12	PIN capture capability	M	ME
24	Function code	M	
26	Merchant category code	M	
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
38	Approval code		C

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Bit	Verification messages Data element name	Message type identifiers	
		100	110
39	Action code		M
41	Card acceptor terminal identification	M	ME
42	Card acceptor identification code	M	ME
43	Card acceptor name/location	M	ME
43-1	Card acceptor name/street/city	M	ME
43-2	Card acceptor postal code	M	ME
43-3	Card acceptor region	M	ME
43-4	Card acceptor country code	M	ME
44	Additional response data		C
48	Additional data, private	M	ME
48-1	Additional data dataset identifier	M	ME
48-2	Additional data data length	M	ME
48-3	Additional data information	M	ME
48-WN	WIC merchant ID	M	ME
52	Personal identification number (PIN) data	M	
53	Security related control information	C	C
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 (see A.12 ):

- 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 full and partial approved, store and forward, declined, rejected and voucher clear (previously authorized) transactions. Only the Financial Presentment request and Financial Presentment response (200/210) messages are used.

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

**Table 5 Financial presentment messages mandatory and conditional data elements**

Bit	Financial Presentment messages Data element name	Message type identifiers	
		200	210
	Message type ID	M	M
	Bit map, primary	M	M
2	Primary account number (PAN)	M	ME
3	Processing code	M	ME
3-1	Transaction type code	M	ME
3-2	Account type code 1	M	ME
3-3	Account type code 2	M	ME
4	Amount transaction	M	ME
5	Amount, settlement (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
22-1	Card data input capability	M	ME
22-2	Cardholder authentication capability	M	ME
22-3	Card capture capability	M	ME
22-4	Operating environment	M	ME
22-5	Cardholder present	M	ME
22-6	Card present	M	ME
22-7	Card data input mode	M	ME
22-8	Cardholder authentication method	M	ME
22-9	Cardholder authentication entity	M	ME

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Bit	Financial Presentment messages	Message type identifiers	
		200	210
	Data element name		
22-10	Card data output capability	M	ME
22-11	Terminal output capability	M	ME
22-12	PIN capture capability	M	ME
24	Function code	M	
26	Merchant category code	M	
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
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/location	M	ME
43-1	Card acceptor name/street/city	M	ME
43-2	Card acceptor postal code	M	ME
43-3	Card acceptor region	M	ME
43-4	Card acceptor country code	M	ME
44	Additional response data		C
48	Additional data, private	M	ME
48-1	Additional data dataset identifier	M	ME
48-2	Additional data data length	M	ME
48-3	Additional data information	M	ME
48-WN	WIC merchant ID	M	ME
48-VN	Voucher number	C	CE
49	Currency code, transaction	M	ME
52	Personal identification number (PIN) data	C	
53	Security related control information	C	C
54	Amounts, additional	C	CE
54-1	Account type code, amounts additional	C	CE
54-2	Amount type code, amounts additional	C	CE
54-3	Currency code, amounts additional	C	CE
54-4	Amount, amounts additional	C	CE
59	Transport data		C
60	EBT data	C	C
61	EBT data	C	C
62	EBT data	M	C

Bit	Financial Presentment messages Data element name	Message type identifiers	
		200	210
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	C
62-PS	WIC prescription food item bit map	M	C
62-PS-2	UPC/PLU data	M	C
62-PS-2-1	UPC/PLU indicator	M	C
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	C
62-PS-6	Item price	M	C
62-PS-7	Purchase quantity	M	C
62-PS-8	Item action code		C
62-PS-9	Original item price		C
62-PS-10	Original purchase quantity		C
62-PS-11	UPC/PLU data length	M	C

The following sections provide additional requirements for the Financial Presentment message class.

**8.3.1 Partial approvals and price adjustments**

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 adjusted items are returned in the *EBT data* (bit 62) data element of the Financial Presentment response (210) message with an *Action code* of “002 – approved for partial amount” and an *Item action code* of “26 – approved for a lower price due to max price exceeded”.

When WIC food items are partially approved in a store and forward transaction or adjusted due to NTE pricing requirements, the Financial Presentment response message (210) shall include only the partially approved or adjusted food item(s). EBT data (bit 62-PS) for each partially approved or adjusted food item shall include:

- a) *UPC data* (bit 62-PS-2),
- b) *Item price* (bit 62-PS-6),
- c) *Purchase quantity* (bit 62-PS-7),
- d) *Item action code* (bit 62-PS-8)
- e) *Original item price* (bit 62-PS-9)
- f) *Original purchase quantity* (bit 62-PS-10) (for store and forward transaction where quantity is different)

In a store and forward transaction, both the *Item price* and the *Purchase quantity* may be approved for less than what was requested. Additionally, 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 *Action code* is set to "002 – approved for a partial amount" and the *Item action code* is set to either "27 – approved for a lower price due to max price exceeded and approved for less units than originally requested due to insufficient units" or "03 – insufficient units".

The discount amount in *Amount, amounts additional* (bit 54) in a store and forward response (210) message is not adjusted as the result of a partial approval or NTE price edits.

### **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 code* (bit 54-2) value of "52" (amount discount) 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. Please note that netting the discount amount could affect the calculation of the future NTE for the food item. The discount amount shall be netted from the *Item price* (bit 62-6) for CVB 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, paid* is 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.

- f) If the *Amount, paid* in the 210 Financial Presentment response message results in zero (\$0.00) after the application of any coupon or discount and no benefit quantity was used, the transaction shall not be submitted for payment.

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 and any non-WIC items purchased.
- b) Surcharges are included in the *Amount, transaction*.
- c) Surcharges may be applied before any coupons or discounts.
- d) When surcharges are calculated on the transaction total rather than the individual items, the last item on which the surcharge is applied shall be adjusted to ensure that the sum of the *Item prices* times the quantities purchased is 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. Surcharges are included in the CVB benefit reduction for the items purchased.

### 8.3.4 Store and forward transactions

A Store and forward transaction is a purchase that is electronically stored with an encrypted PIN by a Card acceptor when the Card acceptor is unable to communicate with the Card issuer to obtain an authorization. The purchase is completed at the point of sale device utilizing the cardholder's card and PIN and the cardholder receives the goods purchased with no ending account balance information being provided. The Card acceptor is responsible for securely storing the transaction information with the encrypted PIN. The stored purchase information is later forwarded to the Card issuer for approval as a Financial Presentment transaction. The Card acceptor accepts liability for declined or partially approved store and forward transactions.

The processing rules for a store and forward transactions are:

- a) Store and forward transaction processing is only applicable for Financial Presentments
- b) A store and forward transaction utilizes the Financial Presentment message class to request approval of the completed, but not approved, transaction where the cardholder is no longer present and no *Approval code* or *Voucher number* is available.
- c) *Date and time, local transaction* (bit 12) is echoed from the original Financial Presentment request message in the store and forward transaction.
- d) *Function code* (bit 24) is set to "203" – resubmission of a previously reversed Financial Presentment or "208" -final representment full amount in the 200 Financial Presentment message to identify a store and forward transaction. The store and forward message is not a representment as defined in ISO 8583.
- e) If a store and forward request is submitted and there are insufficient funds in the client's account, it may be partially approved by the Card issuer for the remaining balance in the account. In the Financial Presentment response message, *Amount, transaction* (bit 4) shall contain the requested amount of the transaction and *Amount, reconciliation* (bit 5) shall contain the new, lesser, approved amount. If a store and forward request is partially approved, the remaining amount shall not be submitted.

- f) *EBT data* (bit 62-PS) shall only contain any partially approved (NTE adjusted or quantity adjusted) WIC prescription food items or declined food items for a partially approved store and forward transaction.
- g) *Item action code* (bit 62-PS-8) associated with a food item may have a value of “26 – approved for a lower price due to max price exceeded” or “27 – approved for a lower price due to max price exceeded and approved for less units than originally requested due to insufficient units” or “03 – insufficient units” in a partially approved store and forward transaction.
- h) The discount amount in *Amount, amounts additional* (bit 54) in a store and forward transaction is not adjusted as the result of a partial approval or NTE price edits.

Store and forward transaction processing is implemented by Institution Identification Number (IIN) and requires certification and approval between the Acquirer and Card issuer prior to implementation. State approval is also required for implementation. Until this is implemented old processing rules and methodology will be in place.

Figure 1 shows the sequence of messages that flow in support of a store and forward transaction using Financial Presentment request and response messages:

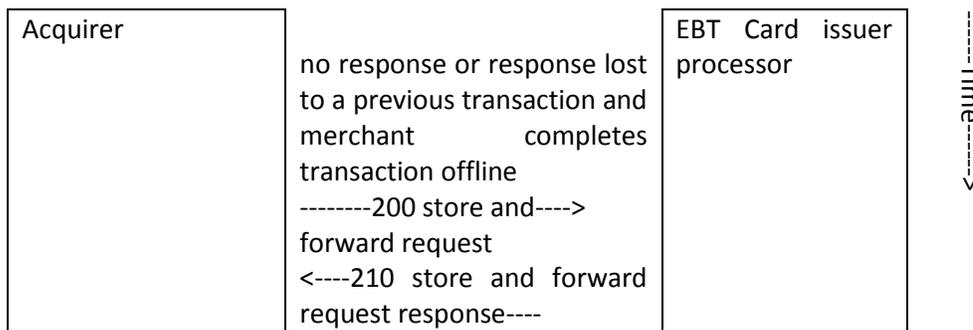


Figure 1 — Store and forward message flows

**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 “116” – insufficient funds” is used to indicate that the food item is rejected due to an invalid UPC or PLU code or there are insufficient benefits available.

The details of the declined food items are returned in the *EBT data* (bit 62-PS) data element of the Financial Presentment response (210) message for *Action code* 002 and 116.

The WIC Participant balance information (bit 62-EA) may be returned, depending on the reason for the decline. If the balance information is provided, it is to be printed on the receipt along with a message explaining the reason for the decline.

**8.3.6 Voucher clear transactions**

A Voucher clear transaction is a request (200) message to clear a previously voice authorized Financial Presentment transaction where a voucher clear *Voucher number* and a voice approval code were assigned and the cardholder is no longer present. The *Processing code* for WIC Voucher clear transactions is "009700". A PIN is not provided, as the cardholder is no longer present. A voucher clear transaction shall not be reversed except for errors in data content or format or for communication errors.

**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 UPC/PLU store file (APL) at the WIC EBT Card Issuer processor’s discretion. Updates to the UPC/PLU store file (APL) may be for any data in the UPC/PLU store file (APL). The message layout is defined in X9.93-1, Clause 8.4.

The following sections provide descriptions of the use of *EBT data* (bit 62) in these messages.

**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* sub-elements and their usage depending on the type of update are shown in Table 6. Where a data element is shown as conditional in Section 6.1 Table 1, the condition is explained by the type of update indicated in the EBT file update request as shown in Table 6.

**Table 6 EBT file update response data (dataset identifier “ED”)**

Bit	62	Dataset identifier	ED	EBT file update response data	
Dataset bit	Name			Usage in UPC/PLU updates	Usage in Category/Sub-Category updates
1	Continuation bit			M	M
2	UPC/PLU data			M	
2-1	UPC/PLU indicator			M	
2-2	Universal Product Code (UPC)			M	
2-2	Price look-up (PLU)			M	
2-3	UPC/PLU check digit			M	
3	Item description			M	
4	Category code			M	M
5	Category description				
6	Sub-Category code			M	M
7	Sub-Category description				M
8	Unit of measure			M	
9	Package size				
10	Benefit quantity			M	
11	Benefit unit description				
12	Item price				
13	Price type				
14	Date, effective				
15	Date, end				
16	Purchase indicator				M
17	Continuation bit			M	M

Bit	62	Dataset identifier	ED	EBT file update response data	
Dataset bit	Name		Usage in UPC/PLU updates		Usage in Category/Sub-Category updates
18	Weighted product indicator		M		
19	Manual voucher indicator		M		
20	Item action code		M	M	
21	UPC/PLU data length		M		

**8.5 Reversal message class**

Reversal advice and Reversal advice response (420/430) messages are used in WIC Online EBT in response to a late (210) Financial Presentment response and to void a transaction.

Table 7 lists the mandatory and conditional data elements used in WIC Reversal messages. See Table 1 for details of usage.

**Table 7 Reversal message mandatory and conditional data elements**

Bit	Reversal messages	Message type identifiers	
		420	430
	<b>Data element name</b>		
n/a	Message type ID	M	M
n/a	Bit map, primary	M	M
2	Primary account number (PAN)	ME	ME
3	Processing code	ME	ME
3-1	Transaction type code	ME	ME
3-2	Account type code 1	ME	ME
3-3	Account type code 2	ME	ME
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	CE
15	Date, settlement		M
22	Point of service data code	M	
22-1	Card data input capability	M	
22-2	Cardholder authentication capability	M	
22-3	Card capture capability	M	
22-4	Operating environment	M	
22-5	Cardholder present	M	
22-6	Card present	M	
22-7	Card data input mode	M	
22-8	Cardholder authentication method	M	
22-9	Cardholder authentication entity	M	
22-10	Card data output capability	M	

Bit	Reversal messages Data element name	Message type identifiers	
		420	430
22-11	Terminal output capability	M	
22-12	PIN capture capability	M	
24	Function code	M	
25	Message reason code	M	
26	Merchant category code	ME	
30	Amounts, original	M	
30-1	Original amount, transaction	M	
30-2	Original amount, reconciliation	M	
32	Acquiring institution identification code	M	ME
33	Forwarding institution identification code	C	CE
35	Track 2 data	CE	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/location	ME	
43-1	Card acceptor name/street/city	ME	
43-2	Card acceptor postal code	ME	
43-3	Card acceptor region	ME	
43-4	Card acceptor country code	ME	
44	Additional response data		C
48	Additional data, private	ME	
48-1	Additional data dataset identifier	ME	
48-2	Additional data data length	ME	
48-3	Additional data information	ME	
48-WIN	WIC merchant number	ME	
48-VN	Voucher number	CE	
49	Currency code, transaction	ME	
53	Security related control information	CE	
54	Amounts, additional	CE	
54-1	Account type code, amounts additional	CE	
54-2	Amount type code, amounts additional	CE	
54-3	Currency code, amounts additional	CE	
54-4	Amount, amounts additional	CE	
56	Original data elements	M	ME
56-1	Original message type	M	ME
56-2	Original systems trace audit number	M	ME
56-3	Original date and time, local transaction	M	ME

Bit	Reversal messages	Message type identifiers	
	Data element name	420	430
56-4	Original acquiring institution identification code	M	ME
59	Transport data		C

The following sections provide additional requirements for Reversal messages.

**8.5.1 Reversal message processing rules**

- a) Reversals shall not be used for adjustments.

Reversals shall not be used to process food returns. Returns are not allowed in WIC EBT except for exchange of an identical food item if the item is defective, spoiled, or the current date exceeds product ‘use by’ date.

Representments shall not be used in WIC Online EBT.

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.

The *Amount, transaction* (bit 4) in Reversal advice (420) messages is the amount reversed; partial reversals are not allowed in WIC EBT.

Reversals shall be used to void a transaction.

Reversals may 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).

*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:

- a) cannot be parsed by the receiver or,
- b) contains a *Message type identifier* that is not recognized by the receiver.

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

Table 8 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 8 Administrative message mandatory and conditional data elements**

Bit	Error messages	Message type identifier
	Data element name	644
	Message type ID	M

Bit	Error messages	Message type identifier
	<b>Data element name</b>	<b>644</b>
	Bit map, primary	M
1	Bit map, secondary	M
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 for use in managing encryption keys.

Table 9 lists the mandatory and conditional data elements used in WIC Verification messages. See Table 1 for details of usage.

**Table 9 Network management messages mandatory and conditional data elements**

Bit	Network management messages	Message type identifiers	
		800/804	810/814
	<b>Data element name</b>		
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
25	Message reason code		C
39	Action code		M
59	Transport data		C
93	Transaction destination institution identification code	M	ME
94	Transaction originator institution identification code	M	ME

Bit	Network management messages	Message type identifiers	
		800/804	810/814
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 Acceptor 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 *X9.131-2015 Financial transaction messages - Electronic benefits transfer (EBT) - WIC retailer interface* standard defines the required messaging for these interfaces.

### 9.1 Card Acceptor Device (CAD) messages

Certain conditions the Card Acceptor Device (CAD) and the WIC EBT Card may encounter require notifying the WIC Cardholder that processing cannot continue. WIC Smart Card EBT processing requires the text messages listed in Table 10 to display on the CAD screen when these conditions occur.

**Table 10 WIC Smart Card EBT CAD messages (by ICC result code)**

Description	Message Display	ICC result code
Default value. Valid/successful transaction.	Do Not Remove Card	0x00
The card presented for transaction contains the cardholder PIN that is already blocked from a previous transaction.	Card Error Return to Clinic	0x01
The card serial number part of the PAN could not be successfully retrieved.	Card Error Return to Clinic	0x02
A read error occurred while attempting to read the PAN and the Issuer Identification Number (IIN) on the card. This code is not associated with error encountered while selecting the root of the dedicated file system on the card.	Card Error Return to Clinic	0x03
The card is not able to process the cryptographic commands or when the cryptogram received from the card fails to match with the one calculated by the CAD for that card.	Card Error Return to Clinic	0x04
A read error occurred while attempting to read WIC administrative information. This code is not associated with error encountered while selecting the root of the dedicated file system for WIC on the card.	Card Error Return to Clinic	0x05
All allowed attempts to present WIC Vendor codes used to access the WIC card failed due to excessive invalid secret code retries.	Card Error Return to Clinic	0x06
IIN for the WIC Authority has expired, is no longer authorized.	Card Error Return to Clinic	0x07
The maximum # of PIN retries has been exceeded but the card failed to block access upon a subsequent valid PIN entry.	Card Error Return to Clinic	0x08
The major or minor data version information read from the card do not match that for the WIC Authority.	Card Error Return to Clinic	0x09
An error was encountered while determining a unique WIC food prescription benefit period.	Card Error Return to Clinic	0x10
There is no WIC food prescription benefit period on the card that matches the date the card was presented at the WIC Vendor.	No Current WIC	0x11
During this visit to the WIC Vendor, the WIC Participant enters one or more invalid PIN attempts such that the maximum number of PIN attempts allowed by the card has been exceeded.	Card Error Return to Clinic	0x12
Card is locked because the PAN has been found on the Hot Card List (HCL).	Card Error Return to Clinic	0x13

<b>Description</b>	<b>Message Display</b>	<b>ICC result code</b>
The card presented for transaction has already been marked as locked in a previous transaction.	Card Error Return to Clinic	0x14
The transaction is reversed because the WIC Cardholder does not have an alternate tender for a CVB split tender purchase.	Benefits restored	0x15
A card that has a damaged chip.	Invalid/Damaged Card	n/a
A card where the IIN does not match a valid WIC Authority in the WIC Vendor's system.	Invalid/Damaged Card	n/a
The card does not contain any remaining benefits in the WIC Participant's benefit prescription that are valid for the current date	No Current WIC	n/a
Verification that cardholder entered PIN is equal to the stored value on the card.	Enter PIN	n/a
Second or greater attempt to verify cardholder entered PIN is equal to the stored PIN value on the card. If the system provides the option for a limited number of PIN retries, upon reaching the limit, the CAD will display "Invalid PIN" then "Remove Card" after a few seconds.	Re-enter PIN Invalid PIN Remove Card	n/a
The card was removed from the CAD before the WIC Participant was instructed to remove it.	Card Removed	n/a
The type of card (training, production/redemption) inserted does not match the mode setting of the CAD.	Authentication Failed	n/a

**9.2 Discounts and coupon information - Smart Card WIC EBT**

X9.93 Part 2 files provides for reporting the discount or coupon amount in three ways in the WIC claim file detail record (D4) as described below:

- a) The discount amount may be in *Amount, discount* when reporting on the discount amount for the entire transaction in the D4. This total discount amount for a purchase is the aggregate of any transaction level discount plus any line item discount(s), if reported in the E3 records.
- b) The discount amount may be netted from the *Amount, transaction* in the D4 by the WIC Vendor. The discount amount is netted from the D4 Amount, transaction only when also netted from the E3 Claim price records. Please note that netting the discount amount could affect the calculation of the future NTE for the food item.
- c) Amount, Item discount may be used for discounts specific to a UPC or PLU code (e.g., line item) instead of reporting a net amount in claim price or total discount per transaction in the D4 record. If reported, the line item discount(s) will be combined with any transaction level or other discounts reflected in the Amount, discount field in the D4 record and each line item discount is reported separately in the *Amount, Item Discount* in the E3 addenda record.
- d) If using the item discount for CVB, the claim price minus the item discount equals the benefit units and purchase quantity in pennies.

Discounts or coupons are handled in transactions as described below:

- e) 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.
- f) The *Amount, discount* is not adjusted as the result of a NTE edit in the Auto-reconciliation file.
- g) Discounts applied to 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. In addition, the discount(s) may be reported in the *Amount, item discount* field if applicable.
- h) The *Amount, paid* is set to zero in the 1230 D4 record if the application of any discounts results in a negative amount when calculating these amounts and shall not result in a net credit to the WIC vendor.
- i) If the *Amount, transaction* in the D4 record results in zero (\$0.00) after the application of any coupon or discount and no benefit quantity was used, the transaction shall not be submitted for payment.

If line item discounts are supported in Smart Card EBT, the claim price minus item discount equals benefit units for CVB items. If the discount applies to multiple CVB items, the discount shall be prorated across the number of units.

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

### 9.3 Surcharges information – Smart Card WIC EBT

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 and any non-WIC items purchased.
- b) Surcharges are included in the *Amount, transaction*.
- c) Surcharges may be applied before any coupons or discounts.
- d) When surcharges are calculated on the transaction total rather than the individual items, the last item on which the surcharge is applied shall be adjusted for rounding issues to ensure that the sum of the *Claim prices* minus *Amount, discount* is 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. Surcharges are included in the CVB benefit reduction for the items purchased.

## 10 WIC Online and Smart Card EBT File processing

WIC Online and Smart Card EBT use the file formats defined in X9.93 Part 2 Files for WIC EBT. This section provides additional information for WIC EBT processing.

Clause 5 of X9.93 Part 2 Files describes the structure of files used in WIC Online and Smart Card EBT. The basic file, Aggregate file and Transactions-only Claim and auto-reconciliation file structure are described along with the use of the *Record sequence number* and *Addenda sequence number* and the values for the *File format version*.

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, Clause 8 the file processing, and Annex C the file layouts.

### 10.1 File names

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 name. Following are the minimum requirements for File naming. Other File names may be supported at the WIC State Agency’s option.

- a) The File 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) Base 36 values shall be used to identify specific File 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

- c) File names shall be constructed using the File coding values shown in Table 12, where “t” indicates a Base 36 format.

**Table 12 File naming**

Coding Value	Name	Description	Format
Record	PIC X(2)	1-2	M
AAA	Extraction tracking ID	A code assigned by the WIC State Agency to identify the extraction file	t 3
FFF	Claim submission tracking ID	A value assigned by the WIC State Agency to track a claim submission file; may be used by the WIC State Agency to support optional features.	t 3
FFFF	WIC Vendor ID	A value assigned by the WIC State Agency to track a file; may be used by the WIC State Agency to support optional features. See section 4.6 f) of the EBT Operating Rules for vendor ID limitations.	an 4
FFFFFFF	Auto-reconciliation File name	First 8 characters of the associated WIC State Agency Card Acceptor extraction 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. See A.10 for values.	an 1
MDYY	File date	Calendar month and day as base-36 values (January = 1, October = A; 2nd = 2, 12th = C) and last 2 digits of the calendar year expressed in the local date and time of the sender	MDYY, tn 4
MM	Minutes of hour	Two digit value representing the minutes of the hour, 00-59	n 2

<b>Coding Value</b>	<b>Name</b>	<b>Description</b>	<b>Format</b>
NNNNNNNN	Original File name	First 8 characters of the referenced Claim submission or extraction file	an 8
see A.7 for values	File identifier code	A static value in the File name extension indicating an attribute of the file	a1
XX	Suffix value	A value in the File name extension used to uniquely identify the file for any ordinal date in the Base 36 range of "00" to "ZZ". Unique for each file derived from the identified forwarding institution's claim submission for the day.	t 2

Using the File naming conventions, the File names defined for WIC EBT processing 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 Extraction files.
- b) MAAAMDYY.CXX (Extraction file). A WIC claim file extracted by the WIC State Agency from the compressed WIC claim file in a Transaction-only, Aggregate or single WIC claim file.
- c) FFFFYJJ.SXX (Card acceptor claim file). A file created by the WIC State Agency or their agent for each Card acceptor in an extracted Transaction-only or Aggregate WIC claim file. *Note: This is an internal file used by the State agency or its processor.*
- d) NNNNNNNN.?XX (Acknowledgment file). A file created by the WIC State Agency or their agent in response to a file received from the forwarding institution where "?" indicates the *File identifier code* (see A.7 for values).
- e) FFFFFFFF.AXX (Auto-reconciliation file). A file created by the WIC State Agency to provide for reconciliation of the claim files submitted by the WIC Vendor.
- f) MDYYHHMM.XXX (APL or HCL file). A UPC/PLU store file (APL) or Hot Card List file created by the WIC State Agency.

**10.2 File processing options**

The following options are available in WIC EBT file processing. WIC State Agencies may choose to support none or any number of these options:

- a) The presence of multiple WIC Vendor claims in a single WIC Claim file submission.
- b) The return of WIC claim files rejected in their entirety.
- c) Enhanced file services for secure encryption methods of file transmission.
- d) Alternate file compression methods (see A.10 for list of compression codes).
- e) A limit on the number of errors reported for an individual claim record. Once the limit is reached, a record shall be rejected. When re-submitted, further errors may be identified.
- f) Multiple, separate WIC Vendor WIC claim file submissions per day.
- g) Wait flags for transfers of WIC claim files.
- h) Aggregate WIC Auto-reconciliation files.
- i) Return of an Acknowledgement file when there are no errors to report.

WIC Vendors shall contact their WIC State Agencies to determine which options are supported.

### 10.3 File transmissions

WIC EBT file processing shall follow the rules defined in X9.93 Part 2: Files, Clause 8.2.

### 10.4 File errors

WIC Smart Card EBT shall use the file error processing described in Section 8.3 in X9.93 Part 2 Files for the following *File names*:

- a) AGGREGATE CLAIM FILE
- b) TXNS-ONLY CLAIM FILE
- c) WIC CLAIM FILE

The WIC Acknowledgment file shall contain information on rejected files using the WIC Acknowledgment file rejection detail record (“D7”). A WIC acknowledgment transaction rejection addenda record (“E5”) shall be generated for each transaction in error. The *Error identifier code* shall be used to identify the error (see A.1).

### 10.5 File records

WIC EBT uses the following types of records as defined in X9.93 Part 2 Files. The record name and the associated *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)

#### 10.5.1 Record sequence number and Addenda sequence number

A *Record sequence number* is assigned to every record in the file, in sequential order. Numbering begins at “1” with the first record on file (the header or super header record) and is incremented by 1 for each subsequent record on file, with the exception of addenda records.

The *Record sequence numbers* for addenda records contain the same *Record sequence number* as the associated detail record as shown in X9.93-2.

The *Addenda sequence numbers* are assigned beginning with “1” for the first addenda record and incremented by one for each subsequent addenda record associated with the detail record. One or more addenda records may be associated with every detail record in a file.

### 10.6 WIC EBT Files data element directory

Clause 6 of X9.93 Part 2 Files describes the data elements used in the standard.

The data element definitions, format, and representations in X9.93 Part 2 Files are used as described in WIC EBT processing except where noted in Table 13 which 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, Hot Card List, Acknowledgment or State Benefit) 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)						Format	Representation	Notes
	Claim	Auto Recon	UPC/PLU	Hot Card	ACK	SB			
Acquiring institution identification code	A0 A1 D4	A1 E1				A1 D4		n 11	right justified, zero-filled
Actual value, data element					E5			ans 100	
Addenda sequence number	E3	E1 E2			E5	E4		n 3	See 10.5.1
Adjustment memo		D5						ans 50	Mandatory if additional data is required for this record; otherwise space filled.
Amount, adjustment		D5					9(10)v99	xn 13	May be either a Debit ("D") or Credit ("C") amount and is not necessarily tied to a single transaction
Amount, Card acceptor claimed					D8		9(10)v99	n 12	The total amount claimed for those transactions.
Amount, Card acceptor claimed total					Z1		9(10)v99	n 12	See 11.5.5. Sum of D8 Amount, card acceptor rejected transactions plus the Amount, card acceptor accepted transactions
Amount, Card acceptor accepted transactions					D8		9(10)v99	n 12	See 11.5.3. The total amount actually passed on for further processing. This should equal the total card acceptor transactions minus those that were rejected.
Amount, Card acceptor accepted transactions total					Z1		9(10)v99	n 12	See 11.5.5. Sum of D8 Amount, card acceptor accepted transactions.
Amount, Card acceptor rejected transactions					D8		9(10)v99	n 12	See 11.5.5. The total amount claimed for rejected transactions.
Amount, Card acceptor rejected transactions total					Z1		9(10)v99	n 12	See 11.5.5. Sum of D8 Amount, card acceptor rejected transactions.
Amount, claim price total	Z2						9(10)v99	n 12	Sum amount of the Claim price in WIC claim addenda records
Amount, claimed		E2					9(7)v99	n 9	The (final) price of the item, calculated by multiplying the Item price times the number of units including any surcharge, see 11.2.9

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Data element name	File and record used in (as identified by record identification code)						Format	Representation	Notes
	Claim	Auto Recon	UPC/ PLU	Hot Card	ACK	SB			
Amount, claimed total	Z1 Z2				Z1		9(10)v99	n 12	Sum amount of the Amount, transaction in all WIC claim detail records
Amount, discount	D4	D4					9(10)v99	n 12	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					9(10)v99	n 12	The absolute value of the sum amount of Amount, discount in all detail records, see 11.2.9
Amount, item discount	E3	E2					9(10)v99	n 12	Zero-filled if not available
Amount, paid		D4 E2					9(10)v99	n 12	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					9(10)v99	n 12	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						anp 6	A code generated by the WIC store system (smart card WIC) or the Issuer processor (online WIC).
Benefit issuing entity	D4					D4		an 15	WIC authority ID or State
Benefit quantity			D4				9(3)v99	n 5	The quantity of the specified item to be deducted from the WIC Participant's prescription benefit when redeemed defined in the originator's specified benefit issuance unit of measure.
Benefit unit description			D4 D6					ans 50	A text description of the specified benefit issuance unit of measure; limited to maximum of 6 digits for receipt use; see A.8 for values
Card acceptor additional description data	D4							ans 100	mandatory if required by bilateral agreement
Card acceptor county code	D4							a 3	See INCITS 31
Card acceptor identification code	D4	E1	D4		D7 D8 E5			an 15	Mandatory on POS transactions. If not used in the UPC/PLU file, it should be space filled.
Card acceptor name/ location	D4							ans 99	
Card acceptor name/street/city	D4							ans 83	
Card acceptor postal code	D4							ans 10	
Card acceptor region	D4							ans 3	Region, state or province
Card acceptor country code	D4							a 3	See ISO 3166 for values

Data element name	File and record used in (as identified by record identification code)						Format	Representation	Notes
	Claim	Auto Recon	UPC/PLU	Hot Card	ACK	SB			
Card acceptor terminal identification	D4	E1						ans 8	Store lane number from WIC Vendor
Card issuer reference data		E1						ans 15	Space filled if not used by the WIC State Agency
Category code	E3	E2	D4 D6				E4	n 2	
Category description			D4 D6					ans 50	Only first 20 characters are significant
Claim file reference ID					A2			an 15	blank if file status = "T"; Original Extraction File Name. Currently 12 characters, the remaining characters will be space filled
Claim file reference ID accepted					D8			an 15	The ARF name that is linked to the Extraction File. Space fill at the end.
Claim price	E3							n 9	total cost of all units of this UPC/PLU purchased
Count, accepted records					Z1			n 7	Sum of all D8 Count, card acceptor transactions minus Count, card acceptor rejected transactions
Count, adds			Z1					n 7	Zero-filled
Count, Card acceptor detail records					Z1			n 7	Count of all D8 records within the file
Count, Card acceptor transactions					D8			n 7	The number of transactions associated with the WIC Card Acceptor that was encountered in the extraction.
Count, Card acceptor rejected transactions					D8			n 7	The number of those transactions that were rejected and not passed on for further processing.
Count, changes			Z1					n 7	Zero-filled
Count, claims in file	Z2							n 10	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					n 7	Zero-filled
Count, detail records	Z1 Z2	Z1 Z2	Z1	Z1	Z1	Z1		n 7	The total number of D4 records in a file for the Claim, ARF, UPC/PLU, Hot Card File and State Benefit file. For ACK files, this is the sum of D7 and D8 records in the file.
Count, forwarded files					Z1			n 7	If submission failed=0;if submission decompressed =1
Count, hot cards				Z1				n 7	
Count, items	D4						D4	n 3	
Counts, rejected records					Z1			n 7	
Count, replacements			Z1					n 7	Zero-filled.
Data element name					E5			an 99	

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Data element name	File and record used in (as identified by record identification code)						Format	Representation	Notes
	Claim	Auto Recon	UPC/ PLU	Hot Card	ACK	SB			
Date and time, effective				D4			CCYYMMDD hhmmss	n 14	In GMT
Date and time, local transaction	D4	D4				D4	CCYYMMDDhhm mss	n 14	As set by originator of the transaction; note that in WIC Online EBT messages it is 12 positions formatted as YYMMDDhhmmss
Date and time, transmission	D4	D4				D4	MMDDhhmmss	n 10	in GMT
Date, claim	A0 A1 Z1						CCYYMMDD	n 8	local date
Date, claim file	Z2						CCYYMMDD	n 8	local date
Date, effective			D4				CCYYMMDD	n 8	as set by sender of file, see 10.7.4
Date, end			D4			D4	CCYYMMDD	n 8	as set by sender of file, see 10.7.4
Date, settlement		A1 Z1					CCYYMMDD	n 8	In WIC Online EBT messages, the date is 6 positions formatted as YYMMDD
Error descriptor					D7 E5			ans 100	
Error detail					D7 E5			an 5	Short text description of the error indicated in the Error identifier Code
Error identifier code					D7 E5			n 4	See A.1
Error record sequence number					D7 E5			n 6	Mandatory if the error identifier code in D7 refers to a specific record sequence number. In D5, record sequence number from the Extraction File.
Error source					D7 E5			an 15	The name of the process that evaluated and identified the error in a file or claim transaction (from x9.93)
Expected value, data element					E5			ans 100	
File create date	A0/A1 Z1/Z2	A0/A1 Z1/Z2	A1 Z1	A1 Z1	A2 Z1	A1 Z1	CCYYMMDD	n 8	See file layouts for usage
File create time	A0/A1 Z1/Z2	A0/A1 Z1/Z2	A1 Z1	A1 Z1	A2 Z1	A1 Z1	hhmmss	n 6	See file layouts for usage
File format version	A0/A1 Z1/Z2	A0/A1 Z1/Z2	A1 Z1	A1 Z1	A2 Z1	A1 Z1		n 2	Value in all records = "05" v4 uses value = "04"
File name	A0 A1	A0 A1	A1	A1	A2	A1		ans 25	See A.13 for values
File process date					A2		CCYYMMDD	n 8	in GMT
File process time					A2		hhmmss	n 6	in GMT

Data element name	File and record used in (as identified by record identification code)						Format	Representation	Notes
	Claim	Auto Recon	UPC/ PLU	Hot Card	ACK	SB			
File rejection error count					A2			n 7	The count of D7 records contained in the ACK file
File sequence number	A0 A1	A0 A1	A1	A1	A2	A1		n 4	Incremented by 1 with each transmission of a file of the same File type and Forwarding institution identification code. Zero filled if not used.
File status code					A2			an 1	Identifies the kind of acknowledgment information provided, see 11.5
File submission date					A2		CCYYMMDD	n 8	in GMT
File submission time					A2		hhmmss	n 6	in GMT
File type	A0 A1	A0 A1	A1	A1	A2	A1		n 8	“NEW” is used for Claim, Autoreconciliation and Acknowledgement files. “UPDATE” is used for Acknowledgement files only. “REPLACE” is used for the UPC/PLU and Hot Card Files.
First date to spend	D4					D4	CCYYMMDD	n 8	As read from card
Forwarding institution identification code	A0 A1	A0 A1	A1	A1	A2	A1		n 11	Unique value assigned by the WIC State Agency
GMT offset	D4	D4						n 4	See 11.2.3
GMT offset sign	D4	D4							See 10.7.5
GMT offset hours	D4	D4							See 10.7.5
Integrated circuit card (ICC) system related data	D4						LLVAR	b...99	See 10.7.6
Integrated circuit card (ICC) result code	D4							an 2, TLV	See 10.7.6; see A.2 for values.
Cyclical redundancy checksum	D4							an 8, TLV	See 10.7.6
Card transaction counter	D4							ans 8, TLV	See 10.7.6
Card signature certificate	D4							ans 8, TLV	See 10.7.6
Item description			D4					ans 50	Only use printable characters in A.11
Item price			D4				9(4)v99	n 6	If Price type indicates a price is not provided (price type = 00) this data element is zero-filled.
Manual voucher indicator			D4					n 1	“0” = no, “1” = yes, see 10.7.2 and A.4 . Smartcard default is “0”.
Message reason code		D4 E2 D5		D4				n 4	See A.5
Message type	D4	D4 D5	D4 D6	D4	D7 D8 E5	D4		n 4	See A.14 V4 will use 1230 for purchase transactions and 1430 for reversals. Reversals will be captured via the POSCC 0x15 in claim files.
Original acquiring institution identification code		D5						n 11	

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Data element name	File and record used in (as identified by record identification code)						Format	Representation	Notes
	Claim	Auto Recon	UPC/ PLU	Hot Card	ACK	SB			
Original acquiring institution identification code length		D5						n 2	
Original addenda sequence number		E2						n 3	
Original data elements		D5						n 35	mandatory if Message reason code indicates this is an adjustment for a specific transaction; otherwise zero-filled
Original date and time, local transaction		D5					CCYYMMDD hhmmss	n 14	As was set by originator of the transaction
Original message type		D5						n 4	V4 will use 1230 for purchase transactions.
Original record sequence number		E2						n 6	The record sequence number of the detail record in this file that is being adjusted in the Auto-reconciliation addenda record 2 ("E2")
Original systems trace audit number		D5						n 6	
Package size			D4					9(3)v99	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 "01600". Default for CVB items is "00100".
PAN length	D4	D4 D5		D4				n 2	Indicates the length of the PAN (e.g., card number) in the PAN data element. 16 or 19 digits in WIC.
PAN record identification code				D4				an 2	Identifies whether the PAN is to be added, changed or deleted
Point of service data code	D4	D4						an 12	Must contain the value 510111111334 or 510211111334.
Card data input capability	D4	D4						an 1	
Cardholder authentication capability	D4	D4						an 1	
Card capture capability	D4	D4						an 1	
Operating environment	D4	D4						an 1	
Cardholder present	D4	D4						an 1	
Card present	D4	D4						an 1	
Card data input mode	D4	D4						an 1	
Cardholder authentication method	D4	D4						an 1	
Cardholder authentication entity	D4	D4						an 1	
Card data output capability	D4	D4						an 1	

Data element name	File and record used in (as identified by record identification code)						Format	Representation	Notes
	Claim	Auto Recon	UPC/ PLU	Hot Card	ACK	SB			
Terminal output capability	D4	D4						an 1	
PIN capture capability	D4	D4						an 1	
Price type			D4					an 2	See A.16
Primary account number (PAN)	D4	D4 D5		D4		D4		n 19	WIC uses 16 or 19 digits. If 16, zero filled to the left.
Processing code	D4	D4				D4		an 6	See A.12
Transaction type code	D4	D4				D4		n 2	See A.12
Account type code 1	D4	D4				D4		an 2	See X9.93-1 Clause B.1 for values.
Account type code 2	D4	D4				D4		an 2	See X9.93-1 Clause B.1 for values.
Purchase indicator			D4						See 10.7.1 and A.6
Purchase quantity	E3						9(3)v99	n 5	Sum of the units purchased of a single UPC/PLU
Receiving institution identification code	A0 A1	A1	A1	A1		A1		n 11	Used by EBT Card Issuer processor or acquiring institution to identify file recipient; may contain only first 6 positions of receiving institution, right-justified and zero-filled
Record identification code	ALL	ALL	ALL	ALL	ALL	ALL		an 2	See 10.5
Record sequence number	ALL	ALL	ALL	ALL	ALL	ALL		n 6	See 10.5.1. For "A0" the value = 000001
Remote issuance reference number						D4		n 6	
Response code		E1						an 2	See <b>Error! Reference source not found.</b> and see X9.93:1 Action codes for values
Retrieval reference number		E1						an 12	Contains the File name of the original claim extraction file
State identifier code			A1	A1				an 2	This data element is alphanumeric; See A.9 for values
Sub-Category code	E3	E2	D4 D6			E4		n 3	
Sub-category description			D4 D6					ans 50	Only first 24 characters are significant
Systems trace audit number	D4	D4						n 6	See notes in 12.1 and 12.4 h).
Total settlement amount		Z1						n 12	
Transmission file name					A2			ans 25	Original Claim Submission File Name. Currently 12 characters. The remaining characters will be space filled
Unit of measure			D4					an 10	See A.15. State agencies may use values from A.8
Units	E3	E2				E4		n 5	Number of benefit units; for CVB, this is the price of the item in pennies up to the available balance (if known)

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Data element name	File and record used in (as identified by record identification code)						Format	Representation	Notes
	Claim	Auto Recon	UPC/PLU	Hot Card	ACK	SB			
UPC/PLU data	E3	E2	D4					n 17	Data element contains 3 sub-elements; UPC/PLU indicator, UPC or PLU number and UPC/PLU check digit.
UPC/PLU indicator	E3	E2	D4					n 1	The first sub-element in the UPC/PLU data; value of "0" indicates a UPC and "1" indicates a PLU
Price look-up (PLU)	E3	E2	D4					n 16	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; a PLU has a data length of 5 (40112) or 6 (940115) digits including the added check digit, right justified and zero-filled
Universal Product Code (UPC)	E3	E2	D4					n 16	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 check digit	E3	E2	D4					n 1	The last digit of the UPC/PLU data
UPC/PLU data length	E3	E2	D4					n 2	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.
WIC authority ID		A1			A2			n 3	See A.9
WIC merchant ID	D4							an 12	Value assigned by each State agency
WIC transaction sequence number						D4		n 6	
WIC transaction signature						D4		an 99	See Annex E
WIC transaction signature length						D4		n 2	

## 10.7 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.

### 10.7.1 Purchase indicator

The *Purchase indicator* is a data element assigned to a UPC/PLU in the detail record (“D4”) of the UPC/PLU store file (APL). The *Purchase indicator* value identifies whether the food item identified by the UPC/PLU can be purchased with benefits issued to specific Sub-Category as well as with benefits issued in the Broadband Sub-Category. By using the *Purchase indicator*, the size of the WIC UPC/PLU store file (APL) is reduced because duplicate entries for food items that can be redeemed in this manner are eliminated. See A.6 for values.

#### 10.7.1.1 Purchase indicator zero (“0”)

A value of zero (“0”) in the *Purchase indicator* data element 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'.

In both WIC Online and Smart Card EBT, a single food item may be assigned to the Broadband Sub-Category (“000”) only. If a WIC State Agency assigns an item only to the Broadband Sub-Category, the *Purchase indicator* is set to zero (“0 - redeemable from this Sub-Category only”) and redemption may only occur from the Broadband Sub-Category (“000”). UPCs assigned to this Broadband Sub-Category shall not be assigned in any other Sub-Categories within the same Category.

The *Purchase indicator* for the indicated UPC/PLU for that food item is set to zero (“0”) and redemption may only be from the Broadband Sub-Category (“000”).

In some implementations based on prior file formats, the *Purchase indicator* may not be present in the WIC UPC/PLU store file (APL). If the *Purchase indicator* is not present in the UPC/PLU store file (APL) 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.

#### 10.7.1.2 Purchase indicator one (“1”)

A value of one (“1”) in the *Purchase indicator* means that the UPC/PLU food item can be purchased either 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 store file (APL) 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.

#### 10.7.1.3 Sub-Category straddle

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 for all food categories and subcategories except Category 19, CVB. For CVB, a State agency may issue to broadband (cat 19, subcat 000) and a nonzero subcategory for fresh infant fruit or vegetables (cat 19, subcat 001). Sub-Category straddle is permitted because the unit of one penny does not affect the computation of the ICC system related data.

When reporting Sub-Category straddle redemptions, two “E2” WIC auto-reconciliation addenda records (see 11.2.5) shall be created, one for each Sub-Category utilized to complete the redemption.

#### **10.7.1.4 Purchase indicator examples**

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 benefit 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**

Using the 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.

#### **10.7.2 Record formatting**

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

- a) Each record may 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.

### 10.7.3 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" – yes, allowed for manual voucher. The default value for smart card State agencies is "0" - no. Manual vouchers are not used in smart card WIC EBT. See A.4 for the list of values. The use of manual vouchers shall not be required for WIC Vendors utilizing integrated ECR system Card Acceptor Devices (CADs).

### 10.7.4 Date, effective and Date, end

The effective and end dates for a food item listed on the UPC/PLU store file (APL) 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 store file (APL) 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 store file (APL) prior to their expiration. Food items are removed from the UPC/PLU store file (APL) after their expiration date has passed. A food item may exist twice in an UPC/PLU store file (APL) when changing to a new category or sub-category and if so, the *Date, effective* and *Date, end* shall not overlap between the two entries. *Date, effective* and *Date, end* are expressed in the date and time of the sender of the UPC/PLU store file (APL).

### 10.7.5 GMT offset

The *GMT offset* data element is a constructed data element consisting of two sub-elements as follows:

- a) *GMT offset sign*; n 1, where plus ("+") = 1 and minus ("-") = 0
- b) *GMT offset hours*; n 3, 000 through 140, where the first two positions 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. This is to allow for all possible time zones.

The rules for using *GMT offset* are as follows:

- a) 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.
- b) Only those time zones where 10ths of an hour are applicable shall utilize a value other than zero in the 10<sup>th</sup> of an hour position.
- c) The *GMT offset* value assigned shall take into account daylight savings time.

### 10.7.6 Integrated circuit card system related data

The *Integrated circuit card (ICC) system related data* data element, is a special form of a composite data element used to transmit ICC related data from the ICC to the Card issuer and from the Card issuer to the ICC. (See X9.93-1 for explanation of composite data elements).

When submitted in a WIC claim file detail record, the *Integrated circuit card (ICC) system related data* data element consists of four data objects totaling up to a fixed length of 99 positions. Each of the four data objects have an associated tag-length-value (TLV) as follows:

- a) Tag, n 2;
- b) Length, n 2;

- c) Value, as defined by the associated data element.

The tag and length are added to the length of the data element in the value portion of each of the four data objects to determine the overall length of the data object. The data elements in the value portion are as follows:

- a) *ICC result code* an 2, where the tag is “81”, the length is 01 see A.2 for values;
- b) *Cyclical redundancy checksum (CRC32)* an 8, where the tag is “82” the length is 04;
- c) *Card transaction counter* an 8, where the tag is “83”, the length is 04 and;
- d) *Card signature certificate* an 8, where the tag is “84”, the length is 04.

The remaining 99 positions shall be space filled.

The values for the tag and length elements in Figure 2 are given as the text representation of the hexadecimal equivalent of the relevant binary values.

TLV coded data objects												filler
T1	L1	V1	T2	L2	V2	T3	L3	V3	T4	L4	V4	to total length of 99
81	01	ICCRC	82	04	CRC32	83	04	CTC	84	04	CSC	

**Figure 2 — Integrated circuit card (ICC) system related data example**

**10.7.7 Response code**

The *Response code* (an 2) data element may be used in the WIC auto-reconciliation addenda record 1 (“E1”) to indicate the disposition of a message request. If not used, it is space filled. In X9.93-1, the data element *Action code* (an 3) is used for the same purpose. X9.93-1 contains a list of the *Response code* values and the corresponding *Action code* values.

**11 WIC EBT File Formats**

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

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

**11.1 WIC claim extraction files**

WIC claim extraction 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 extraction file records are shown in Table 13.

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

Table 14 lists the data elements contained in the WIC claim extraction file super header record. The super header record is only required for Aggregate Claim extraction files.

**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" , see 10.5
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 = "05" v4 uses value = "04"
Forwarding institution identification code	PIC 9(11)	25-35	M	Unique value assigned by the WIC State Agency
File name	PIC X(25)	36-60	M	See A.13 for values
File type	PIC X(8)	61-68	M	"NEW"
File sequence number	PIC 9(4)	69-72	M	Zero filled if not used.
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. The claim extraction file header record is required for all three claim extraction file types – single, transactions only and aggregate.

**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" , see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
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 = "05" v4 uses value = "04"
Forwarding institution identification code	PIC 9(11)	25-35	M	Unique value assigned by the WIC State Agency
File name	PIC X(25)	36-60	M	See A.13 for values
File type	PIC X(8)	61-68	M	"NEW"
File sequence number	PIC 9(4)	69-72	M	Zero filled if not used.
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

Data element name	Format	Position	Condition	Notes
Date, claim	PIC 9(8)	95-102	M	CCYYMMDD 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 has been updated 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.

Free items resulting from discounts or coupons shall not be decremented from the WIC Participant’s Smart Card nor submitted in the claim file.

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" , see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
Message type	PIC 9(4)	9-12	M	See A.14 Use 1230 for purchase transactions and 1430 for reversals.
WIC merchant ID	PIC X(12)	13-24	M	
Card acceptor identification code	PIC X(15)	25-39	M	In the Transactions claim extract files, detail and associated addenda records should be sequenced by the Card acceptor identification code and Systems trace audit number in the detail record. State agencies may not edit for out of sequence trace audit numbers.
PAN length	PIC 9(2)	40-41	M	
PAN	PIC 9(19)	42-60	M	
Processing code	PIC X(6)	61-66	M	See A.12
Transaction type code	PIC X(2)	61-62	M	
Account type code 1	PIC X(2)	63-64	M	
Account type code 2	PIC X(2)	65-66	M	
Amount, transaction	PIC 9(10)v99	67-78	M	claim amount; amount is zero for denied transactions or reversals
Systems trace audit number	PIC 9(6)	79-84	M	
Date and time, transmission	PIC 9(10)	85-94	M	In GMT, MMDDhhmmss
Date and time, local transaction	PIC 9(14)	95-108	M	CCYYMMDDhhmmss, as set by the originator of the transaction
Point of service data code	PIC X(12)	109-120	M	
Card data input capability	PIC X(1)	109	M	
Cardholder authentication capability	PIC X(1)	110	M	

Data element name	Format	Position	Condition	Notes
Card capture capability	PIC X(1)	111	M	
Operating environment	PIC X(1)	112	M	
Cardholder present	PIC X(1)	113	M	
Card present	PIC X(1)	114	M	
Card data input mode	PIC X(1)	115	M	
Cardholder authentication method	PIC X(1)	116	M	
Cardholder authentication entity	PIC X(1)	117	M	
Card data output capability	PIC X(1)	118	M	
Terminal output capability	PIC X(1)	119	M	
PIN capture capability	PIC X(1)	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)	140-222	M	
Card acceptor postal code	PIC X(10)	223-232	M	
Card acceptor region	PIC X(3)	233-235	M	Region, state or province
Card acceptor country code	PIC X(3)	236-238	M	See ISO 3166 for values
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)	342-344	M	
Benefit issuing entity	PIC X(15)	345-359	M	
First date to spend	PIC 9(8)	360-367	M	As read from card, CCYYMMDD
Amount discount	PIC 9(10)v99	368-379	M	
Integrated circuit card (ICC) system related data	PIC X(99)	380-478	M	Maximum length is 99
ICC result code	PIC 9(6)	380-385	M	See A.2 for values
Cyclical redundancy checksum (CR32)	PIC X (12)	386-397	C	Mandatory if ICC result code = 0x00 or 0x15, otherwise space filled.
Card transaction counter	PIC X (12)	398-409	C	Mandatory if ICC result code = 0x00 or 0x15, otherwise space filled.
Card signature certificate	PIC X (12)	410-421	C	Mandatory if ICC result code = 0x00 or 0x15, otherwise space filled.
filler	PIC X (57)	422-478	M	Space filled
GMT offset	PIC 9(4)	479-482	M	See 10.7.5
GMT offset sign	PIC 9(1)	479	M	See 10.7.5
GMT offset hours	PIC 9(3)	480-482	M	See 10.7.5

**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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
Addenda sequence number	PIC 9(3)	9-11	M	See 10.5.1
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	number of benefit units of the item being reported
UPC/PLU data	PIC 9(17)	22-38	M	
UPC/PLU indicator	PIC 9 (1)	22	M	
UPC or PLU	PIC 9(15)	23-37	M	
UPC/PLU check digit	PIC 9(1)	38	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		UPC data length, including check digit and leading zero, is 12, 13 or 14. PLU length is 5 or 6 including the calculated check digit. Right justified, zero filled. The leading zero for any UPC is a significant digit.
Amount, Item Discount	PIC 9(10)v99	55-66	O	Total item discount based on number of units purchased. Zero filled if not used. The item level discount amounts should be added to the D4 discount amounts to get a total discount amount for entire transaction.

Amount, Item discount may be used for discounts specific to a UPC or PLU code instead of reporting a net amount in claim price or total discount per transaction in the D4 record. If reported for smartcard WIC, the line item discounts will be combined with any transaction level or other discounts reflected in the Amount, discount field in the D4 record. If using the item discount for CVB, the claim price minus the item discount equals the benefit units in pennies.

**11.1.5 WIC claim file trailer record (“Z1”)**

Table 18 lists the data elements used in the WIC claim file trailer record. Required for all file types.

**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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
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 – "05" v4 uses value = "04"
Count, detail records	PIC 9(7)	25-31	M	Total number of D4 records in file
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	The absolute value of the sum amount of Amount, discount in all detail records, see 11.2.9

**11.1.6 WIC claim file super trailer record (“Z2”)**

Table 19 lists the data elements used in the WIC claim super trailer record. The super trailer record is required for Aggregate claim files only.

**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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
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 = "05" v4 uses value = "04"
Count, detail records	PIC 9(7)	25-31	M	Total number of D4 records in file
Date, claim file	PIC 9(8)	32-39	M	Local date
Count, claims in file	PIC 9(10)	40-49	M	Each header/trailer pair will equal one claim
Amount, claimed total	PIC 9(10)v99	50-61	M	Sum amount of the Amount, transaction in all WIC claim detail records
Amount, discount total	PIC 9(10)v99	62-73	M	The absolute value of the sum amount of Amount, discount in all detail records, see 11.2.9

Data element name	Format	Position	Condition	Notes
Amount, claim price total	PIC 9(10)v99	74-85	M	Sum amount of the Claim price in WIC claim addenda records

**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.

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

The WIC auto-reconciliation super header record (“A0”) is only required for Aggregate WIC Auto-Reconciliation files.

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
Record identification code	PIC X(2)	1-2	M	value = "A0" , see 10.5
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 = "05" v4 uses value = "04"
Forwarding institution identification code	PIC 9(11)	25-35	M	Unique value assigned by the WIC State Agency
File name	PIC X(25)	36-60	M	See A.13 for values
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". Zero filled if not used.

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

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

- a) The *File create date* and *file create time* are expressed in GMT.

- b) The *File sequence number* in the header record is the same as in the “A0” super header record. Zero filled if not used.

c) A header record is required for all ARF file types.

Table 21 shows the layout of the WIC auto-reconciliation 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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
File create date	PIC 9(8)	9-16	M	CCYMMDD, in GMT
File create time	PIC 9(6)	17-22	M	hhmmss, in GMT
File format version	PIC 9(2)	23-24	M	value = "05" v4 uses value = "04"
Forwarding institution identification code	PIC 9(11)	25-35	M	Unique value assigned by the WIC State Agency
File name	PIC X(25)	36-60	M	See A.13 for values
File type	PIC X(8)	61-68	M	"NEW"
File sequence number	PIC 9(4)	69-72	M	Same value as in A0 record, if present. Zero filled if not used.
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 as incorporated in the *Item price*.
- 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, 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.

Table 22 shows the layout of the WIC auto-reconciliation detail record.

**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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
Message type	PIC 9(4)	9-12	M	See A.14 V4 will use "1230" for purchase transactions and "1430" for reversals.

<b>Data element name</b>	<b>Format</b>	<b>Position</b>	<b>Condition</b>	<b>Notes</b>
PAN length	PIC 9(2)	13-14	M	
PAN	PIC 9(19)	15-33	M	
Processing code	PIC X(6)	34-39	M	See A.12
Transaction type code	PIC X (2)	34-35	M	
Account type code 1	PIC X (2)	36-37	M	
Account type code 2	PIC X (2)	38-39	M	
Amount, transaction	PIC 9(10)v99	40-51	M	amount of claim requested by the merchant
Systems trace audit number	PIC 9(6)	52-57	M	
Date and time, transmission	PIC 9(10)	58-67	M	In GMT, MMDDhhmmss
Date and time, local transaction	PIC 9(14)	68-81	M	As set by the originator of the transaction
Point of service data code	PIC X(12)	82-93	M	
Card data input capability	PIC X(1)	82	M	
Cardholder authentication capability	PIC X(1)	83	M	
Card capture capability	PIC X(1)	84	M	
Operating environment	PIC X(1)	85	M	
Cardholder present	PIC X(1)	86	M	
Card present	PIC X(1)	87	M	
Card data input mode	PIC X(1)	88	M	
Cardholder authentication method	PIC X(1)	89	M	
Cardholder authentication entity	PIC X(1)	90	M	
Card data output capability	PIC X(1)	91	M	
Terminal output capability	PIC X(1)	92	M	
PIN capture capability	PIC X(1)	93	M	
Amount, discount	PIC 9(10)v99	94-105	M	
Message reason code	PIC 9(4)	106-109	M	See A.5 for values
Amount, paid	PIC 9(10)v99	110-121	M	Sum of the amount, paid of each associated WIC auto-reconciliation addenda record 2 ("E2") less Amount, discount and adjusted for any errors, see 11.2.5
GMT offset	PIC 9(4)	122-125	M	as set by originator of transaction, see 10.7.5
GMT offset sign	PIC 9(1)	122	M	See 10.7.5
GMT offset hours	PIC 9(3)	123-125	M	See 10.7.5

**11.2.4 WIC auto-reconciliation addenda record 1 ("E1")**

The WIC auto-reconciliation addenda record 1 ("E1") provides additional information about the transaction in the related "D4" record. 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 shows the layout of the WIC auto-reconciliation addenda record.

**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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
Addenda sequence number	PIC 9(3)	9-11	M	See 10.5.1
Acquiring institution identification code	PIC 9(11)	12-22	M	
Retrieval reference number	PIC X(12)	23-34	M	Contains the File name of the original claim extraction file
Approval code	PIC X(6)	35-40	M	
Response code	PIC X(2)	41-42	M	See <b>Error! Reference source not found.</b>
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 used by the WIC State Agency

**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 response 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	00000000165 (\$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	0000000330 (\$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	0000000000 (\$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 shows the layout of the WIC auto-reconciliation addenda record.

**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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
Addenda sequence number	PIC 9(3)	9-11	M	See 10.5.1
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	
UPC/PLU indicator	PIC 9(1)	22	M	
UPC or PLU	PIC 9(15)	23-37	M	
UPC/PLU check digit	PIC 9(1)	38	M	
Amount, claimed	PIC 9(7)v99	39-47	M	
Amount, paid	PIC 9(10)v99	48-59	M	Amount claimed, less any adjustments by the WIC State Agency.
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	zero-filled if not available
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 report a reversal. Instead, a WIC auto-reconciliation detail record (“D4”) and any associated WIC auto-reconciliation addenda records (“E2”) are used to report 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 reported separately. D5 records in an Aggregate auto-reconciliation file shall be placed prior to the super trailer record. (This ensures that in an Aggregate File the D5 records do not impact the numbering of the record sequence number).
- b) In WIC Online EBT, the auto-reconciliation adjustment record (“D5”) may be present in addition to a “D4” reversal record to provide the *Original data elements* from the Financial Presentment (200) request message. If the auto-reconciliation adjustment record (“D5”) is present, the *amount, adjustment* in the

auto-reconciliation adjustment record (“D5”) shall be set to zero to avoid errors in computing the *Total amount settlement* in the Z1 record.

Table 25 shows the layout of the WIC auto-reconciliation adjustment 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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
Message type	PIC 9(4)	9-12	M	See A.14 By agreement with State agency, may use 0420 = purchase adjustment and 0430 = general adjustment.
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	16 or 19 digits used in WIC
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)	51-54	M	V4 will use 1230 for purchase transactions, 1430 for reversals
Original systems trace audit number	PIC 9(6)	55-60	M	
Original data and time, local transaction	PIC 9(12)	61-72	M	
Original acquiring institution identification code length	PIC 9(2)	73-74	M	
Original acquiring institution identification code	PIC 9(11)	75-85	M	
Adjustment memo	PIC X(50)	86-135	M	Mandatory if additional data is required for this record; otherwise space filled.
Card Acceptor Identification Code	PIC X(15)	86-100	M	
Adjustment Memo	PIC X(35)	101-135	M	

Adjustments can be associated with a specific past purchase recorded in an earlier auto-reconciliation file (0420) or there will be adjustments associated with the submitting Card Acceptor ID and applied against the claim in general (0430) without reference to any specific purchase.

**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.
- c) All Auto reconciliation files require header/trailer records – single, transactions only and aggregate.

Table 26 shows the layout of the WIC auto-reconciliation trailer record.

**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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
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 = "05" v4 uses value = "04"
Count, detail records	PIC 9(7)	25-31	M	Total number of D4 records in file
Total settlement amount	PIC 9(10)v99	32-43	M	
Date, settlement	PIC 9(8)	44-51	M	CCYYMMDD
Amount, discount total	PIC 9(10)v99	52-63	M	Absolute value of individual discount amounts from detail records in file. The item level discount amounts should be added to the D4 discount amounts to get a total discount amount for entire transaction. See 11.1.4.

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

The WIC auto-reconciliation super trailer record (“Z2”) is required only for Aggregate WIC Auto-Reconciliation 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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
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 = "05" v4 uses value = "04"
Count, detail records	PIC 9(7)	25-31	M	Total number of detail (D4) records
Total Settlement Amount	PIC 9(10)v99	32-43	M	Sum of total settlement amount in the Z1 records.
Date, Settlement	PIC 9(8)	44-51	M	CCYYMMDD

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Data element name	Format	Position	Condition	Notes
Amount, Discount total	PIC 9(10)v99	52-63	M	Sum of the Amount, discount in the Z1 records

### 11.2.9 WIC auto-reconciliation amounts processing

**Error! Reference source not found.** 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		EBT Message Type		Source of data element value	
Record ID code	Data element	WIC Online	WIC Smart Card	WIC Online EBT data element	WIC Smart Card EBT record
D4	Amount, transaction	200 Financial Presentment request	230 in D4	Bit 4, Amount, transaction (including any surcharges applied to the Item price)	Sum of the Addenda Amount, paid minus the Amount, discount equals the Amount, transaction.
D4	Amount, transaction (reversal)	420 Reversal request	430 in D4	Bit 4, Amount, transaction (including any surcharges applied to the item price)	Zero filled
D4	Amount, discount	210 Financial Presentment response	230 in D4	Bit 54-4, Amount, amounts additional	Amount, discount from the D4 record in the Claim file.
D4	Amount, paid	210 Financial Presentment response	230 in D4	Amount, transaction including any surcharges incorporated in the Item price, less Amount, discount and any adjustments by the WIC State Agency.	Amount, transaction in Claim file "D4" record including any surcharges applied to the Item price less any discounts and adjustments by the WIC State Agency; set to zero by the WIC State Agency if transaction is rejected.
D4	Amount, paid (reversal)	430 Reversal response	430 in D4	Bit 4, Amount, transaction, see 8.5.1 (0)	Zero filled
E2	Amount, claimed	200 Financial Presentment request	N/A	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	N/A	Bit 62-PS-6 item price (includes any surcharges) x bit 62-PS-7 Purchase quantity less any associated Amount, adjustment from the D5 or other adjustments made by the WIC State Agency	Amount, claimed from E3 record less any associated adjustments made by the WIC State Agency

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, minus *amount, discount* in the D4 equals the *amount, paid* of the D4.

- b) *For online only.* 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) *For online only.* 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) *For online only.* 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) above.
- f) Everything is zeroed out for reversal records for Smart Card (D4 Amount, transaction, D4 Amount, discount, D4 Amount, paid; and E2 Amount, claimed and E2 Amount, paid).

**11.3 WIC UPC/PLU store file (APL)**

The WIC UPC/PLU store file (also known as the Authorized Product List or APL file) is used to create and update a list of WIC authorized products at the WIC Vendor. Super-header and Super-trailer records are not used with this file. At a minimum, a single, statewide file shall be produced by each WIC State Agency for use by their WIC vendors. Additional, separate UPC/PLU store file (APLs) may be produced at the WIC State Agency's option.

**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 store file (APL) 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", see 10.5
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 = "05" v4 uses 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"; see A.13
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. Zero filled if not used.
State identifier code	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 positions of receiving institution, right-justified and zero-filled

11.3.2 WIC UPC/PLU detail record (“D4”)

Table 30 lists the data elements used in the WIC UPC/PLU detail record.

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" , see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
message type	PIC 9(4)	9-12	M	See A.14
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/PLU check digit	PIC 9(1)	29	M	
Item description	PIC X(50)	30-79	M	Only use printable characters in A.11
Category code	PIC 9(2)	80-81	M	
Category description	PIC X(50)	82-131	M	Recommend space-filled and use “D6” instead. First 20 characters are significant.
Sub-Category code	PIC 9(3)	132-134	M	
Sub-Category description	PIC X(50)	135-184	M	Recommend space-filled and use “D6” instead. Only first 24 characters are significant.
Unit of measure	PIC X(10)	185-194	M	See A.8 or A.15 for values. State agencies may use values from A.8 for Unit of Measure.
Package size	PIC 9(3)v99	195-199	M	Default for CVB items is “00100”. 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 “01600”.
Benefit quantity	PIC 9(3)v99	200-204	M	The quantity of the specified item to be deducted from the WIC Participant’s prescription benefit when redeemed defined in the originator’s specified benefit issuance unit of measure.
Benefit unit description	PIC X(50)	205-254	M	A text description of the specified benefit issuance unit of measure; limited to maximum of 6 digits for receipt use; see A.8 for values
Item price	PIC 9(4)v99	255-260	M	If Price type indicates a price is not provided (price type = 00) 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 A.16 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, as set by sender of file. Zero-filled if not assigned.
Date, end	PIC 9(8)	286-293	M	CCYYMMDD, as set by sender. Zero filled if not assigned.
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 10.7.1 and A.6 . Will be included in v4 implementations.

Data element name	Format	Position	Condition	Notes
Manual voucher indicator	PIC 9(1)	297	C	Mandatory if manual vouchers are used by the WIC Vendor; default is "1". Default value for smart card APL files is "0".

### 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 store file (APL). 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
Record identification code	PIC X(2)	1-2	M	value = "D6" , see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
message type	PIC 9(4)	9-12	M	See A.14
Filler	PIC X (67)	13-79	M	Space filled
Category code	PIC 9(2)	80-81	M	
Category description	PIC X(50)	82-131	M	Only first 20 characters are significant
Sub-Category code	PIC 9(3)	132-134	M	
Sub-Category description	PIC X(50)	135-184	M	Only first 24 characters are significant
Benefit unit description	PIC X(50)	185-234	M	Only first 6 characters are significant; see A.8 for values

### 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 store file (APL) 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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
File create date	PIC 9(8)	9-16	M	CCYYMMDD as set by sender
File create time	PIC 9(6)	17-22	M	hhmmss as set by sender
File format version	PIC 9(2)	23-24	M	value – "05" v4 uses 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.

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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	value = "000001"
File create date	PIC 9(8)	9-16	M	CCYYMMDD, in GMT as set by sender
File create time	PIC 9(6)	17-22	M	hhmmss, in GMT as set by sender
File format version	PIC 9(2)	23-24	M	value = "05" v4 uses 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	"HOTLIST REPLACEMENT FILE"; see A.13
File type	PIC X(8)	61-68	M	"REPLACE"
File sequence number	PIC 9(4)	69-72	M	Zero filled if not used.
State identifier code	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
Record identification code	PIC X(2)	1-2	M	value = "D4", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
Message type	PIC 9(4)	9-12	M	See A.14
PAN record identification code	PIC X(2)	13-14	M	value = "DA – add" or "DC - change" or "DD - delete"

Data element name	Format	Position	Condition	Notes
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)	36-49	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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
File create date	PIC 9(8)	9-16	M	CCYYMMDD, as set by sender
File create time	PIC 9(6)	17-22	M	hhmmss, as set by sender
File format version	PIC 9(2)	23-24	M	value – "05" v4 uses value = "04"
Count, detail records	PIC 9(7)	25-31	M	Total number of D4 records
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. At State agency option, an acknowledgement file will be returned for a Claim Submission file or Claim Extraction file only if an E5 or D7 record is reported. There will be one acknowledgement file per extraction file if the claim submission file was accepted.

#### 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", see 10.5
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 = "05" v4 uses value = "04"
Forwarding institution identification code	PIC 9(11)	25-35	M	Unique value assigned by the WIC State Agency
File name	PIC X(25)	36-60	M	"ACKNOWLEDGMENT FILE" ; see A.13
File type	PIC X(8)	61-68	M	"NEW" or "UPDATE" "New" is used for an Acknowledgement file in response to a "New" Claim Submission File. "Update" is used when modifications from the original Acknowledgment file are necessary

Data element name	Format	Position	Condition	Notes
				(i.e. 5615).
File sequence number	PIC 9(4)	69-72	M	Zero filled if not used.
Transmission file name	PIC X(25)	73-97	M	Original Claim Submission File Name. Currently 12 characters. The remaining characters will be space filled
Claim file reference ID	PIC X(15)	98-112	C	blank if file status = "T"; Original Extraction File Name. Currently 12 characters, the remaining characters will be space filled
Claim Submission File submission date	PIC 9(8)	113-120	M	CCYYMMDD, in GMT; The date the file was delivered to the State agency or processor
File submission time	PIC 9(6)	121-126	M	hhmmss, in GMT
File process date	PIC 9(8)	127-134	M	CCYYMMDD, in GMT; The date the Claim Submission File was processed by the State agency or processor
File process time	PIC 9(6)	135-140	M	hhmmss, in GMT
File status code	PIC X(1)	141	M	"T"= transmission level rejection; Inability to open the Submission File or the extraction file. "C" = claim file level rejection; Ability to process the Extraction with D7's back in the ACK. Could also contain D8 and E5's. "A" = Accepted; Extraction File contains transaction level Errors, and ACK contains D8/E5 records, or a clean Submission.
File rejection error count	PIC 9(7)	142-148	C	The count of D7 records contained in the ACK file
WIC authority ID	PIC 9(3)	149-151	M	See <a href="#">A.9</a>

**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
Record identification code	PIC X(2)	1-2	M	value = "D7", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
Message type	PIC 9(4)	9-12	M	See A.14
Additional data elements:				
Error identifier code	PIC 9(4)	13-16	M	see A.1
Error descriptor	PIC x(100)	17-116	M	
Error source	PIC X(15)	117-131	O	The name of the process that evaluated and identified the error in a file or claim transaction (from x9.93)
Error detail	PIC X(5)	132-136	O	Short text description of the error indicated in the Error identifier Code

Data element name	Format	Position	Condition	Notes
Card Acceptor identification code	PIC X(15)	137-151	C	Mandatory if the error identifier code refers to a specific Card Acceptor
Error record sequence number	PIC 9(6)	152-157	C	Mandatory if the error identifier code refers to a specific record sequence number
Data element name	PIC X(99)	158-256	O	
Expected value, data element	PIC X(100)	257-356	O	
Actual value, data element	PIC X(100)	357-456	O	

### 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. One D8 record will be provided for each Card Acceptor ID for consecutive ranges of transaction line items. In a Transactions Only or Aggregate file there could be a D8 record for each card acceptor ID contained in the file.

**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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
Message type	PIC 9(4)	9-12	M	See A.14
Card acceptor identification code	PIC X(15)	13-27	M	
Count, Card acceptor transactions	PIC 9(7)	28-34	M	The number of transactions associated with the WIC Card Acceptor that was encountered in the extraction.
Amount, Card acceptor claimed	PIC 9(10)v99	35-46	M	The total amount claimed for those transactions.
Count, Card acceptor rejected transactions	PIC 9(7)	47-53	M	The number of those transactions that were rejected and not passed on for further processing.
Amount, Card acceptor rejected transactions	PIC 9(10)v99	54-65	M	The total amount claimed for rejected transactions.
Amount, Card acceptor accepted transactions	PIC 9(10)v99	66-77	M	The total amount actually passed on for further processing. This should equal the total card acceptor transactions minus those that were rejected.

Claim file reference ID accepted	PIC X(15)	78-92	M	The ARF name that is linked to the Extraction File. Space fill at the end.
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**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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1 Record sequence number of the associated D8 record
Addenda sequence number	PIC 9(3)	9-11	M	See 10.5.1
Message type	PIC 9(4)	12-15	M	See A.14
Card acceptor identification code	PIC X(15)	16-30	M	
Error record sequence number	PIC 9(6)	31-36	M	Record sequence number from the Extraction File
Error source	PIC X(15)	37-51	M	
Error identifier code	PIC 9(4)	52-55	M	See A.1
Error descriptor	PIC x(100)	56-155	M	
Data element name	PIC X(99)	156-254	M	
Expected value, data element	PIC X(100)	255-354	M	
Actual value, data element	PIC X(100)	355-454	M	
Error detail	PIC X(5)	455-459	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", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
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 = "05" v4 uses value = "04"
Count, detail records	PIC 9(7)	25-31	M	Sum of all D7 & D8 records in the file
Count, Card acceptor detail records	PIC 9(7)	32-38	M	Count of all D8 records within the file
Count, accepted records	PIC 9(7)	39-45	M	Sum of all D8 Count, card acceptor transactions minus Count, card acceptor rejected transactions
Count, rejected records	PIC 9(7)	46-52	M	Sum of all D8 Card, acceptor rejected transactions

Data element name	Format	Position	Condition	Notes
Count, forwarded files	PIC 9(7)	53-59	M	If submission failed=0;if submission decompressed=1
Amount, Card acceptor claimed total	PIC 9(10)v99	60-71	M	Sum of D8 Amount, card acceptor rejected transactions plus the Amount, card acceptor accepted transactions
Amount, Card acceptor rejected transactions total	PIC 9(10)v99	72-83	M	Sum of D8 Amount, card acceptor rejected transactions
Amount, Card acceptor accepted transactions total	PIC 9(10)v99	84-95	M	Sum of D8 Amount, card acceptor accepted transactions

State agencies may stop processing after a designated number of errors are identified (the threshold for errors determined by each State agency). At State agency option, an Acknowledgement File may not be provided if no E5 or D7 records to report.

### 11.6 WIC state benefit file

The WIC state benefit files contain transactions intended to update the benefit information on a cardholder's card (Remote Benefits Available file) or report on benefits loaded (Remote Benefits Loaded file). It is an optional service that may be implemented by the WIC State Agency. There are two different files exchanged, as indicated by the *File name* data element (see A.13 ). The different usage of data elements in the records of each file are indicated in the Notes column.

#### 11.6.1 WIC state benefit header record ("A1")

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
Record identification code	PIC X(2)	1-2	M	value = "A1", see 10.5
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 = "05" v4 uses value = "04"
Forwarding institution identification code	PIC 9(11)	25-35	M	
File name	PIC X(25)	36-60	M	See A.13
File type	PIC X(8)	61-68	M	For load = "REPLACE", for loaded = "NEW"
File sequence number	PIC 9(4)	69-72	M	Zero filled if not used
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, otherwise zero-filled

**11.6.2 WIC state benefit detail record (“D4”)**

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

The following *Processing codes* are used in the WIC state benefit file detail records for Remote Benefit processing:

- a) WIC benefits authorized for load (“029700”) – Provided by the WIC State Agency or their agent to the WIC Vendor in the Remote benefits available file to identify the benefits to be loaded.
- b) WIC benefits calculated balance (“309700”) – Provided by the WIC State Agency or their agent to the WIC Vendor in the Remote benefits available file to identify the benefit balance calculated by the issuing system at the time the remote issuance was made available.
- c) WIC benefits balance (“209700”) – Provided by the WIC Vendor to the WIC State Agency or their agent in the Remote benefits loaded file to identify the actual card benefit balance before the load.
- d) WIC benefits loaded (“229700”) – Provided by the WIC Vendor to the WIC State Agency or their agent in the Remote benefits loaded file to identify the benefits loaded.

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

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "D4" , see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
Message type	PIC 9(4)	9-12	M	See A.14
PAN length	PIC 9(2)	13-14	M	
PAN	PIC 9(19)	15-33	M	
Processing code	PIC X(6)	34-39	M	See A.12 for values
Transaction type code	PIC X (2)	34-35	M	
Account type code 1	PIC X (2)	36-37	M	
Account type code 2	PIC X (2)	38-39	M	
Date and time, transmission	PIC 9(10)	40-49	M	in GMT, MMDDhhmmss
Date and time, local transaction	PIC 9(14)	50-63	M	As set by the originator of the transaction, CCYYMMDDhhmmss
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)	93-100	M	CCYYMMDD
Date, end	PIC 9(8)	101-108	M	CCYYMMDD
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	
Remote issuance reference number	PIC 9(6)	216-221	M	

**11.6.3 WIC state benefit addenda record (“E4”)**

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
Record identification code	PIC x(2)	1-2	M	value = "E4", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
Addenda sequence number	PIC 9(3)	9-11	M	See 10.5.1
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 (“Z1”)**

Data element name	Format	Position	Condition	Notes
Record identification code	PIC X(2)	1-2	M	value = "Z1", see 10.5
Record sequence number	PIC 9(6)	3-8	M	See 10.5.1
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 – "05" v4 uses value = "04"
Count, detail records	PIC 9(7)	25-31	M	Total number of D4 records in file.

## 12 Processing Considerations

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

### 12.1 Receipt data

Receipts shall comply with the following processing rules:

- a) A balance inquiry is not a separate transaction in WIC Smart Card EBT. A unique *Systems trace audit number* may not be assigned to a balance inquiry for a WIC Smart Card EBT account and a WIC Smart Card EBT balance inquiry is not included as a separate transaction provided to the WIC State Agency in a claim file.
- b) A WIC Purchase receipt shall list the detail of all CVB food items with the *Purchase quantity* shown as a cash amount.
- c) While *Data and time, local transaction* provides for time to be shown to the second, it is acceptable to print to the minute on receipts.
- d) The WIC Purchase Receipt shall identify those items which were paid for using WIC benefits.
- e) If the purchased food item quantity is one (“1”) it may be implied without listing “1 @”.
- f) Any discounts (coupons) applied to the WIC purchase shall be shown on the WIC Purchase Receipt.
- g) If the transaction is approved, all balances are to be returned in the response data provided to the WIC Vendor, including zero balances.
- h) If the transaction is declined, the balance information may or may not be returned to the WIC Vendor, depending on the reason for the decline.
- i) If the balance information is returned to the WIC Vendor, the receipt shall display all zeroes for benefits with zero balances.
- j) If the WIC participant has used all their benefits for the benefit period or has no benefits issued for the benefit period and therefore has all zero benefit balances, the POS terminal shall display “No Current WIC”.

For WIC Online EBT, the bit map position and data element name associated with the required receipt data is shown in Table 45 and Table 46. For WIC Smart Card EBT, card related data is extracted from the card and the record in which the data may appear is shown.

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

**Table 45 Balance inquiry receipt data**

Data on receipt	Associated data element name	Location of data	
		WIC Online EBT (bit)	WIC Smart Card EBT
PAN (print last 4 positions of the PAN only)	Primary account number (PAN)	2	Card
Store name	Card acceptor name/location	43	from WIC Vendor

Data on receipt	Associated data element name	Location of data	
		WIC Online EBT (bit)	WIC Smart Card EBT
Store street address, city, state abbreviation and zip code	Card acceptor name/location	43	from WIC Vendor
Local date and time of balance inquiry	Date and time, local transaction ( n 12 in WIC Online EBT, n 14 in WIC Smart Card EBT)	12	from WIC Vendor
Earliest benefit expiration date or benefit effective and benefit ending dates	Earliest benefit expiration date (WIC Online EBT) First date to spend (WIC Smart Card EBT)	62-EF	Card
Benefits available:			
Benefit food item description	Item description or Sub-Category description	From APL	From APL
Benefit quantity	Benefit quantity	62-EA-11	Card
Benefit unit Description	Benefit Unit Description	From APL	From APL
Unique transaction identifier	Systems trace audit number (WIC Online EBT) and/or Approval code A combination of data from the transaction to create a unique identifier (WIC Smart Card EBT)	11 and/or 38	n/a

Table 46 lists the mandatory data on WIC Purchase receipts as identified in the WIC Operating Rules.

**Table 46 WIC Purchase receipt(s) data**

Data on receipt	Associated data element name	Location of data	
		WIC Online EBT (bit)	WIC Smart Card EBT (card or record)
PAN (print last 4 positions of the PAN only)	Primary account number (PAN)	2	Card
Store name	Card acceptor name/location	43	From WIC Vendor
Store street address, city, state abbreviation and zip code	Card acceptor name/location	43	From WIC Vendor
Store lane number (if available)	Card acceptor terminal identification	n/a	From WIC Vendor
Local date and time of balance inquiry (WIC Smart Card EBT) Local date and time of purchase (WIC Online EBT)	Date and time, local transaction	12	From WIC Vendor
Benefits redeemed:			
Purchase food item quantity (units)	Benefit quantity (in Financial Presentment response (210) for WIC Online EBT)	62-PS-7	From APL
Purchased food item description	Item description or Sub-Category description based on Sub-Category code of item redeemed	From APL	From APL
Benefit Unit Description	Benefit Unit Description	From APL	From APL
Unit cost	Item price (in Financial Presentment response (210) (WIC Online EBT) Claim price representing total cost of all purchased units of a single item (WIC Smart Card EBT) less any discounts.	62-PS-6	From WIC Vendor
Total purchase amount	Sum of Item price x Purchase quantity of all items (in Financial Presentment response (210) less any discounts	62-PS-7 62-PS-6, 54-4	Amount, claimed from WIC Vendor for all items in purchase
Benefits remaining:			

Data on receipt	Associated data element name	Location of data	
		WIC EBT (bit)	Online D6 (card or record)
Subcategory description	Sub-Category description	From record in APL	D6 From D6 record in APL
Benefit quantity	Benefit quantity	62-EA-11	Shall be retrieved from the card by WIC Vendor
Benefit Unit Description	Benefit Unit Description	From APL	From APL
Unique transaction identifier	Systems trace audit number (WIC Online EBT) A combination of data from the transaction to create a unique identifier (WIC Smart Card EBT)	11	From WIC vendor
WIC receipt indicator	No related data element; identifies the food item was purchased with WIC benefits	n/a	n/a

**12.2 UPC/PLU store file (APL) and National UPC database**

The National UPC database (NUPC) is a system maintained by FNS to help State agencies create and maintain their UPC/PLU store file (APLs). State agencies may access the NUPC database to obtain UPC/PLU product information. FNS requires State agencies to send or make available a copy of their UPC/PLU file (APL) quarterly upon reaching statewide operations.

**12.3 WIC Smart Card split tender processing**

Split tender refers to a CVB food item being redeemed in part using CVB WIC benefits and in part using one or more additional methods of payment when the CVB food balance has been exceeded. Split tender shall not be used for non-CVB Prescription benefit purchases (foods other than fruits and vegetables).

The following processing rules shall be followed for split tender:

- a) The WIC claim file addenda record (“E3”) shall contain the *Units, Purchase quantity* and *Claim price* of the portion of CVB benefit applied to the WIC food item.
- b) The WIC Purchase Receipt shall list the detail of each (CVB) food item redeemed and shall match the values shown for *Units, Purchase quantity* (shown as cash (\$)), and *Claim price* in the E3 addenda record.

**12.4 WIC Smart Card EBT benefit reversal processing**

Benefit reversal is an option for WIC Vendors that refers to restoring the benefits to a WIC Cardholder’s smart card benefit balance by voiding or cancelling the last 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 time of the transaction 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. The ability to place a hold is dependent on the capabilities of the POS system.
- d) The benefits reversed (restored to card) shall be returned to the original benefit prescription stored on the card, regardless of the time at which the benefit reversal occurred.

- e) If the WIC purchase was written to the card, the entire WIC purchase shall be reversed utilizing a benefit reversal. No partial approval is allowed.
- f) The WIC Participant may initiate a separate, subsequent transaction for any WIC items they wish to purchase with their WIC benefits, including those restored with the benefit reversal. The WIC Vendor may retain information on the WIC food items scanned so they do not have to be re-scanned.
- g) The transaction that includes one or more reversals may proceed after the item that exceeds the CVB balance is removed from the WIC portion of the transaction. The transaction records (D4 and E3) for the remaining items that are to be purchased with WIC tender within the same transaction must keep the same *Systems trace audit number*.
- h) A single WIC claim file detail record (“D4”) and associated addenda records (“E3”) are submitted for the benefit reversal transaction and shall include and match all of the original data from the original transaction including the original signature, *PAN*, *Systems trace audit number* and an *ICC result code* of “0x15” to indicate a benefit reversal. The *Amount*, *transaction*, *Claim price*, *Amount*, *discount*, and *Amount*, *item discount* fields shall be set to zero (\$0.00) for a benefit reversal. The message type will be 1430.
- i) Multiple, sequential WIC claim file detail records (“D4”) for multiple benefit reversals (including their associated addenda records (“E3”)) may be submitted for the same WIC transaction.
- j) The data from the WIC EBT Card used for a benefit reversal shall match the data from the WIC EBT Card used in the original transaction.
- k) If the WIC EBT Card is still within the CAD immediately after a benefit reversal transaction is completed, a subsequent purchase transaction may be completed without re-authenticating.
- l) The new balance of WIC benefits shall be provided to the WIC Participant on the receipt and the printed balance shall be read from the card, not calculated.
- m) WIC Vendors may determine how to implement this feature within their POS systems while providing adequate controls to prevent misuse.
- n) The card transaction counter must be incremented on a card when a benefit reversal is completed.

## Annex A - Data element code tables

The data element code values used in WIC EBT are 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 will be submitted for approval to the X9 Financial Services standards committee prior to implementation. See X9.93-1, Clause 10 and X9.93-2, Clause 9 for instructions on requesting new code values or changes to existing code values. 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 or if information or a warning is provided. 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	Description	Action
0000	No error	Accept
0001-0100	Reserved	
0101-0999	<b>File level error identifier codes</b>	
0101	The line length does not match format of the version specified. <i>NOTE: Either too long or too short.</i>	Reject
0102	The date provided does not match the format specified. <i>NOTE: For example, Date = 05/03/2017, Format = YYYYMMDD.</i>	Reject
0103	A date field contained invalid characters or the date characters were in the wrong place.	Reject
0104-0107	Reserved	
0108	The month portion of a date string was not within the range of 1 – 12.	Reject
0109	The day portion of a date string was not within the range of 1 – 31.	Reject
0110	A date field contained a reference to an invalid day.	Reject
0111	A general purpose error occurred.	Reject
0112	The date provided was prior to the minimum acceptable date.	Reject
0113	The date provided exceeded the maximum acceptable date.	Reject
0114	An invalid record was read while attempting to read a trailer record.	Reject
0115	An unexpected record type was encountered where a detail, addenda or trailer record was expected.	Reject
0116-0120	Reserved	
0121	Invalid date/time - improperly formed or in the future. <i>NOTE: Out-of-range time element in a Date/Time value: Hours must be 0-23; Minutes &amp; seconds must be 0-59'</i>	Reject
0122-0127	Reserved	
0128	An attempt was made to read past the end of file. <i>NOTE: (Unexpected end of file marker)</i>	Reject
0129	The Submission file was received before the date encoded in the file name.	Reject
0130	Reserved	
0131	The File Format field in the claim trailer contained an unsupported file format identifier.	Reject
0132	The File, create date/time specified in the header and trailer do not match.	Reject
0133	The Claim date specified in the header and the Claim date specified in the trailer do not match.	Reject

Code	Description	Action
0134	The number of claim detail records in trailer record does not match number of claim detail records.	Reject
0135	The Amount, claimed total in trailer record does not match the sum of detail records.	Reject
0136	The File format version in the claim header record contained an unsupported File format version.	Reject
0137-0156	Reserved	
0157	Merchant ID and Card Acceptor ID mismatch	Reject
0158	Reserved	
0159	Claim file contains detail records with varying WIC merchant ID values. <i>NOTE: This error applies to a Single Claim Extraction file only.</i>	Reject
0160	Invalid or Unknown Card Acceptor ID.	Reject
0161	An invalid character was found in a claim file record. <i>NOTE: The invalid character is often an alphabetic character in a numeric field.</i>	Reject
0162-0168	Reserved	
0169	The Submission or Extraction file's name has an invalid character in the extension.	Reject
0170-0176	Reserved	
0177	The claim file contains a control character. <i>NOTE: WIC claim files must only contain printable characters, carriage return/newline characters and an end-of-file marker.</i>	Reject
0178	Reserved	
0179	The Record sequence number for a header record is invalid or is out of order.	Reject
0180-0181	Reserved	
0182	Unexpected Record Identification code received.	Reject
0183	Invalid File name for the specified format.	Reject
0184—0187	Reserved	
0188	The Receiving institution identification code invalid. <i>NOTE: The field must be the WIC Authorities IIN. Left pad w/'0000'.</i>	Reject
0189-0197	Reserved	
0198	More than one extraction in zipped submission claim file. <i>NOTE: Optional by State Agency parameter.</i>	
0199	A compression error was encountered.	Reject
0200	An Extraction with the same name has already been processed, or is in process.	Reject
0201	The File type field is invalid.	Reject
0202	Submission or Extraction file is empty, EOF encountered while trying to read the header.	Reject
0203-0209	Reserved	
0210	Submission or extraction is not from an authorized forwarding institution or Acquirer.	Reject
0211	Submission and extraction filenames must be 12 characters long.	Reject
0212-0218	Reserved	
0219	Total Amount, Discount field in trailer record not equal to sum of detail record Amount, Discount. This amount, Discount includes reported item level discounts and any other discounts.	Reject
0220-0226	Reserved	
0227	The File create date must occur on or before the received date.	Reject
0228	The first four characters of the Claim Submission name are encoded with invalid values.	Reject
0229-0251	Reserved	
0252	The Record sequence number for a trailer record is invalid or is out of order.	Reject

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Code	Description	Action
0253-0312	Reserved	
0313	An invalid record was read while attempting to read an aggregate file's super trailer record.	Reject
0314-0315	Reserved	
0316	An unexpected record type was encountered.	Reject
0317-0324	Reserved	
0325	The Count, claims in file in the super trailer is incorrect.	Reject
0326	Reserved	
0327	The super trailer's File format version must equal the super header's File format version.	Reject
0328	The super header's File format version must be greater than or equal to the sub-section' header File format version. <i>Note: The Super header must be equal to the greatest subsection header's version.</i>	Reject
0329	Reserved	
0330	A claim submission file with the same name has already been processed, or is in process.	Reject
0331	Reserved	
0332	Invalid Submission tracking ID specified in the characters 2-4 of File name.	Reject
0333	Invalid suffix (last 2 characters of extension).	Reject
0334	A claim submission file must have .TXX suffix. <i>NOTE: Any extension issue including special characters.</i>	Reject
0335	The extraction File name must have a .CXX suffix.	Reject
0336	Reserved	
0337	The date encoded within the filename was invalid. <i>NOTE: This applies to both Submission and Extraction names.</i>	Reject
0338	Reserved	
0339	Count, detail records specified in the super trailer does not match the number of detail records.	Reject
0340	The Amount, claimed total in the super trailer record does not match the sum of the detail records.	Reject
0341	Reserved	
0342	The Amount, discount total in super trailer record does not match sum of detail record discounts.	Reject
0343	The Amount, claim price total specified in super trailer does not equal sum of all addenda records.	Reject
0344	The maximum number of errors has been exceeded.	Reject
0345-0349	Reserved	
0350	There are no detail or addenda records for this Card acceptor, only header and trailer records.	Reject
0351-0352	Reserved	
0353	Missing CR or LF character	Reject
0354	Reserved	
0355	All Transactions in this section failed.	Reject
0356-0999	Reserved	
1000- 1999	<b>Transaction level error identifier codes</b>	
1000-1001	Reserved	
1002	Other State agency's IIN	Reject
1003-1101	Reserved	

Code	Description	Action
1102	The date provided does not match the format specified. <i>NOTE: For example. date = 05/03/2000, Format = YYYYMMDD.</i>	Reject
1103	A date field contained invalid characters or the date characters were in the wrong place.	Reject
1104-1107	Reserved	
1108	The month portion of a date string was not within the range of 1 – 12.	Reject
1109	The day portion of a date string was not within the range of 1 – 31.	Reject
1110	A date field contained a reference to an invalid day.	Reject
1111	Reserved	
1112	The date provided was prior to the minimum acceptable date.	Reject
1113	The date provided exceeded the maximum acceptable date.	Reject
1114-1115	Reserved	
1116	PAN Length and PAN received mismatch.	Reject
1117-1118	Reserved	
1119	The Purchase quantity must be > zero for a valid transaction	Reject
1120	Reserved	
1121	Invalid date/time – improperly formed or in the future. <i>NOTE: Out-of-range time element in a Date/Time value: Hours must be 0-23; Minutes &amp; seconds must be 0-59'.</i>	Reject
1122-1140	Reserved.	
1141	The message type in a transaction record did not match the claim format version.	Reject
1142	An addenda sequence number is invalid or out of order.	Reject
1143	The number Count, items specified in the transaction detail record must be greater than zero	Reject
1144-1156	Reserved	
1157	Merchant ID and Card Acceptor ID mismatch	Reject
1158	Invalid or unknown Merchant ID	Reject
1159	Reserved	
1160	Invalid or Unknown Card Acceptor ID.	Reject
1161	An invalid character was found in a claim file record. <i>NOTE: The invalid character is often an alphabetic character in a numeric field.</i>	Reject
1162-1163	Reserved	
1164	The Primary Account Number contained an IIN for an invalid or unknown WIC State Agency.	Reject
1165	The PAN must represent a non-zero positive integer. All 19 characters in the PAN record must be digits.	Reject
1166	All Transaction Date/Times must be less than or equal to the File Create Date. <i>NOTE: File Create date is when the file was created.</i>	Reject
1170	A hex string was submitted that contained invalid characters.	Reject
1171-1173	Reserved	
1174	The Processing code for a claim detail record in this claim file was incorrect.	Reject
1175	The Record sequence number for a claim detail record is invalid or is out of order.	Reject
1176	The PAN length for a claim detail record was not within the range of 1 to 19.	Reject
1177	The claim file contains a control character. <i>NOTE: WIC claim files must only contain printable characters, carriage return/newline characters and an end-of-file marker.</i>	Reject
1178-1192	Reserved	

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Code	Description	Action
1193	The Record sequence number for an addenda record is invalid or is out of order.	Reject
1194	Reserved	
1195	The UPC value includes non-numeric characters.	Reject
1196	A price was claimed for an item, but the number of benefit units consumed was reported as zero.	Reject
1197-1209	Reserved	
1210	Max of 254 E3 addenda records per D4 detail record. <i>NOTE: One or more D4 records was associated with 255 or more addenda records</i>	Reject
1211-1214	Reserved	
1215	The Point of service data code field must contain the value 510111111334 or 510211111334.	Reject
1216	Reserved	
1217	The TLV data in the ICC system related data field is invalid.	Reject
1218-1219	Reserved	
1220	Amount, transaction or Amount, discount is greater than zero for a failed transaction.	Reject
1221-1222	Reserved	
1223	First date to spend field is not filled with zeroes for a failed transaction.	Reject
1224	Count, items was greater than zero for a failed transaction.	Reject
1225	Reserved	
1226	For each purchase, Transaction Amount must equal sum of addenda Claim Price Amounts minus Discount Amount. Discount Amount includes any reported item level discounts.	Reject
1227-1246	Reserved	
1247	The value for the Systems trace audit number was zero.	Reject
1248	Reserved	
1249	No value was specified for the Card acceptor terminal ID.	Reject
1250-1306	Reserved	
1307	The number of E3 Addenda records does not equal the number in the D4 Count, items field.	Reject
1308	The First date to spend date must occur on or before the File create date.	Reject
1309	First date to spend field was filled with zeroes for a good transaction.	Reject
1310-1317	Reserved	
1318	Time zone offset in the GMT offset should only be numeric.	Reject
1319	GMT offset error.	Reject
1320-1352	Reserved	
1353	An addenda record for a benefit reversal transaction contained a Claim price not equal to zero	Reject
1354-1999	Reserved	
2000-2999	<b>Extraction section level error identifier codes</b>	
2000-2101	Reserved	
2102	The date provided does not match the format specified. <i>NOTE: For example, Date = 05/03/2000, Format = YYYYMMDD.</i>	Reject
2103	A date field contained invalid characters or the date characters were in the wrong place.	Reject
2104-2107	Reserved	

Code	Description	Action
2108	The month portion of a date string was not within the range of 1 – 12.	Reject
2109	The day portion of a date string was not within the range of 1 – 31.	Reject
2110	A date field contained a reference to an invalid day.	Reject
2111	Reserved	
2112	The date provided was prior to the minimum acceptable date.	Reject
2113	The date provided exceeded the maximum acceptable date.	Reject
2114-2120	Reserved	
2121	Invalid date/time - improperly formed or in the future. <i>NOTE: Out-of-range time element in a Date/Time value: Hours must be 0-23; Minutes &amp; seconds must be 0-59'</i>	Reject
2122-2130	Reserved	
2131	The File format field in the claim trailer contained an unsupported File format identifier.	Reject
2132	The File create dates specified in the header and trailer do not match.	Reject
2133	The Claim Date specified in the header and the Claim Date specified in the trailer do not match.	Reject
2134	The number of claim detail records in trailer record does not match number of claim detail records.	Reject
2135	The Amount, claimed total in trailer record does not match the sum of detail records.	Reject
2136	The File format version in the claim header record contained an unsupported File format version.	Reject
2137-2156	Reserved	
2157	Merchant ID and Card Acceptor ID mismatch.	Reject
2158	Reserved	
2159	This claim section contains detail records with varying Merchant ID values	Reject
2160	Invalid or Unknown Card Acceptor ID.	Reject
2161	An invalid character was found in a claim file record. <i>Note: The invalid character is often an alphabetic character in a numeric field.</i>	Reject
2162-2176	Reserved	
2177	The claim file contains a control character. <i>NOTE: WIC claim files must only contain printable characters, carriage return/newline characters and an end-of-file marker.</i>	Reject
2178	Reserved	
2179	The Record sequence number for a header record is invalid or is out of order.	Reject
2180-2181	Reserved	
2182	Unexpected Record Identification code received.	Reject
2183	Invalid File name for the specified format.	Reject
2184-2200	Reserved	
2201	The File type field is invalid.	Reject
2202-2209	Reserved	
2210	Submission or extraction is not from an authorized forwarding institution or acquirer	Reject
2211-2218	Reserved	
2219	Total Amount, Discount field in trailer record not equal to sum of detail record Amount, Discount. <i>NOTE: Discount Amounts between it and its preceding header.</i>	Reject
2220-2328	Reserved	
2329	The sub-section header File Create Date must be less than or equal to the Super header's File Create Date.	Reject
2330-2343	Reserved	

Code	Description	Action
2344	The maximum number of errors has been exceeded.	Reject
2345-2349	Reserved	
2350	There are no detail or addenda records for this Card acceptor, only header and trailer records	Reject
2351-2354	Reserved	
2355	All Transactions in this section failed.	Reject
2356-2999	Reserved	

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

The *Integrated circuit card (ICC) result code* is a tag (See Section 10.7.6) 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 a transaction conducted with the Smart Card. This data element was formerly referred to as “POSCC code”. Table 48 shows the values for the *Integrated circuit card (ICC) result code*.

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

Value	Description
0x00	Transaction okay
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	IIN not authorized
0x08	Invalid PIN lock
0x09	Invalid data version
0x10	Food prescription conflict
0x11	No food package for current date
0x12	PIN presentation failure
0x13	Card hot carded by the grocer
0x14	Card presented is already hot carded
0x15	Benefits restored
0x16	Reserved for future use
0x17	Remote benefits loaded successfully
0x18-0x99	Reserved for national use

**A.3 Item action code (bit 62-PS-8 and 62-ED-20)**

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 the values used for WIC EBT. These codes apply only to online systems.

Table 49 Item action codes

Code	Item action text
00	Approved
01	Category not prescribed
02	Sub-category not prescribed
03	Insufficient units
04	UPC/PLU not prescribed
05	Add/update record
06	Delete record
07-25	Reserved for national use
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 (only applicable for store and forward transactions)
28-99	Reserved

**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”, “D5” and “E3” records)

The *Message reason code* is used in online messages in bit 25 and in the Auto-reconciliation file detail (“D4”), adjustment (“D5”) and addenda (“E3”) 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 used in WIC Online EBT. WIC Smart Card EBT has assigned additional values as shown in italics in Table 51. If the MRC is equal to “3002”, “3701”, “3705”, “3706”, or “3707” do not lock the card if the Hot Card Effective Date and Time is before the Card Authorization Date. Also, if the MRC is equal to “3002”, “3701”, “3705”, “3706”, or “3707” do not lock the card if the Hot Card Effective Date and Time is later than the System Date and Time.

**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
	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)	<i>3000</i>	<i>Lost</i>
	<i>3001</i>	<i>Stolen</i>
	<i>3002</i>	<i>Undelivered card prior to receipt at WIC State Agency – Temporary MRC</i>
	<i>3003</i>	<i>Counterfeit card – PAN confirmed</i>
	<i>3004</i>	<i>No reason given/other</i>
	3005-3399	Reserved for ISO use
	3400-3699	Reserved for national use

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Usage	Codes	Description
	3700	<i>Failed to function prior to issuance</i>
	3701	<i>Missing – delivered but prior to issuance – Temporary MRC</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 – Temporary MRC</i>
	3706	<i>Administrative lock- Temporary MRC</i>
	3707	<i>Change in family status – Temporary MRC</i>
	3708-3999	Reserved for private use
Reversal messages (4x0)	4000-5559	Reason for a reversal/void
	4000	Customer cancellation
	4001	Unspecified, no action taken
	4002	Suspected malfunction
	4003	Format error, no action taken
	4004	Completed partially (not permitted in WIC EBT)
	4005	Original amount incorrect
	4006	Response received too late
	4007	Card acceptor device unable to complete transaction
	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

Usage	Codes	Description
	5300-5599	Reserved for national use
Auto-reconciliation detail record (D4)	5600	<i>Incomplete (failed) transaction</i>
	5601	<i>Duplicate purchase</i>
	5602	<i>For test/training card</i>
	5603	<i>Reserved</i>
	5604	<i>Card on hot card list</i>
	5605	<i>Purchase not received timely</i>
	5606	<i>Purchase in the vendor's termination period</i>
	5607	<i>Reserved</i>
	5608	<i>Reserved</i>
	5609	<i>Purchase after last date to spend</i>
	5610	<i>Purchase before first date to spend</i>
	5611	<i>Invalid signature</i>
	5612	<i>Invalid relationship between Card acceptor and Acquiring institution identification code</i>
	5613	<i>Invalid First date to spend</i>
	5614	<i>Reserved</i>
	5615	<i>Store temporarily suspended for payment of claims</i>
	5616	<i>Purchase items adjustment total</i>
	5617	<i>Reserved</i>
	5618	<i>Not EBT Certified</i>
	5619	<i>Reserved</i>
	5620	<i>Illegal PAN check digit</i>
Auto-reconciliation addenda record 2 (E2)	5621	<i>UPC redeemed out of date range</i>
	5622-5647	<i>Reserved</i>
	5648	<i>CVB purchased Units not equal to Claim price minus item discount</i>
	5649	<i>UPC/PLU not authorized for this Card acceptor</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>
Auto-reconciliation adjustment record (D5)	5653	<i>Compliance buy or Certification Adjustment</i>
Auto-reconciliation addenda record 2 (E2)	5654	<i>Amount exceeds not-to-exceed price</i>
	5655	<i>PWIC exceeds 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>
Auto-reconciliation adjustment record (D5)	5659	<i>Manual cost containment adjustment</i>
	5660-5694	<i>Reserved</i>
	5695	<i>Malformed claim exception</i>
	5696	<i>Other credit/debit</i>

Usage	Codes	Description
	5697	Monitor disallowance (post payment) credit/debit
	5698	Over/Underpaid Vendor
	5699	Increase based upon appeal credit/debit
	5700	Reserved
	5702	CSN read failure
	5703	DF system read failure
	5704	Cryptographic authentication failure
	5705	DFWIC read failure
	5706	Secret code presentation failure
	5707	IIN not authorized
	5708	Invalid PIN lock
	5709	Invalid data version
	5710	Food prescription conflict
	5711	No food package for current date
	5712	PIN presentation failure
	5713	Card hot-carded by grocer
	5714	Card presented is already hot-carded
	5715	Transaction reversal occurred
	5716-5999	Reserved
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-16 and “D4” record)**

The Purchase indicator is a flag indicating if the flagged UPC food item may be redeemed from the Broadband Sub-Category. It is required in UPC/PLU detail records. Table 52 lists the *Purchase indicator* values.

**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 identifier code

The *File identifier code* data element is used in the File name that precedes the file content to identify characteristics of the file. A forwarding institution shall support all *File identifier codes*. Table 53 lists the File identifier codes.

**Table 53 File identifier codes**

Code	Description
A	WIC auto-reconciliation file
C	File contains an extraction file that conforms to X9.93 Part 2 Files
D	Acknowledgment file in response to a duplicate claim submission file
F	Acknowledgment file in response to a duplicate extraction file
K	Acknowledgment file in response to a successful non-duplicate extraction file; pre-processing completed
P	Acknowledgment file in response to a claim submission file with an unauthorized submission tracking ID
S	EBT Card acceptor claim file
T	Claim submission file contains one or more extraction files that conform to X9.93 Part 2 Files
U	Acknowledgment file in response to an update to previous successful extraction file
Z	Acknowledgment file in response to a claim submission file with a compression or naming error

### A.8 Benefit unit description (“D4” UPC/PLU records and bit 62-EA-12)

The *Benefit unit description* data element is used in the UPC/PLU store file (APL) “D4” record and “D6” record. It is also used in WIC Online EBT in *EBT data* (bit 62) with the dataset identifier “EA – balance information” (bit 62-EA-12). The values shown in Table 54 for the *Benefit unit description* shall be used to standardize the display on receipts and the data in the UPC/PLU store file (APL) that represent the food item benefit’s issued size, i.e., one eight ounce (8 oz.) jar of peanut butter would have a *Unit of measure* of “ounces” or “oz” and a *Benefit unit description* value of “jar”. Systems shall support the maximum abbreviations except where the display is limited. The Benefit Unit Description values may also be used in any records using a Unit of Measure.

**Table 54 Benefit unit description literal and abbreviated values**

Description	Minimum abbreviation	Maximum abbreviation (if applicable)
3 Pack	3PK	3 PACK
4 Pack	4PK	4 PACK
6 Pack	6PK	6 PACK
8 Pack	8PK	8 Pack
Bag	BAG	BAG
Bar	BAR	BAR
Baskets	BKS	BASKET
Bottle	BTL	BOTTLE
Box	BOX	BOX
Brick	BRK	BRICK
Brick pack	BRP	BRPACK

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Description	Minimum abbreviation	Maximum abbreviation (if applicable)
Can / Bottle	CBL	CANBOT
Can	CAN	CAN
Capsules	CAP	CAPSUL
Container	CTR	CTNR
Carton	CTN	CARTON
Carton/Bottle	CTB	CT/BTL
Case	CAS or CSE	CASE
Dozen	DOZ	DOZEN
Envelope	ENV	ENVEL
Gallon	GAL	GALLON
Gram(s)	GM	GRAM
Half Gallon	HGL	HLFGAL
Item	ITM	ITEM
Jar / Bag	JBG	JARBAG
Jar	JAR	JAR
Jar/Bag/Can	JBC	J/B/C
Jug	JUG	JUG
Liquid Concentrate	LCN	LCONCN
Liters	LTR	LITERS
Ounce	OZ	OUNCE
Ounce (dry)	OZD	OZDRY
Ounce (fluid)	OZF	FL OZ
Pack	PCK	PACK
Package	PKG	PKG
Packet	PKT	PKT
Pint	PT	PINT
Pouch	PCH or POU	POUCH
Pound	LB	POUND
Powder	PDR	POWDER
Pudding	PUD	PUDING
Quart	QT	QUART
Ready to Feed Pudding	RPD	RTFPUD

Description	Minimum abbreviation	Maximum abbreviation (if applicable)
Ready to Feed	RTF	RDFEED
Solid Bar	SBR	SOLBAR
Value	VLU	VALUE
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 code* 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 Bank Identification Number (BIN) which shall be added as issued. Table 55 provides a cross-referenced list of the *State identifier codes* and *WIC Authority ID* values, their associated IIN, PAN length and technology used. Users are recommended to contact FNS for the current version of this table.

**Table 55 State identifier codes and WIC Authority IDs**

WIC State Agency	State Identifier Code	FNS Region	WIC Authority ID	IIN (BIN)	PAN length	Technology
Acoma, Canoncito, and Laguna (ACL)	A1	SW	001			
Alabama	AL	SE	002	610383	16	Online
Alaska	AK	W	003	610408	16	Online
American Samoa	AS	W	004	507662	16	Online
Arizona	AZ	W	005	507663	16	Online
Arkansas	AR	SW	006	610292	16	Smart Card
California	CA	W	007	605856	16	Online
Cherokee Nation of Oklahoma	C2	SW	009	502267	16	Smart Card
Cheyenne River Sioux Tribe	C3	MP	010			
Chickasaw Nation	C4	SW	011	606316	16	Online
Choctaw Nation of Oklahoma	C5	SW	013	610371	16	Online
Citizen Potawatomi Nation	P2	SW	014	610373	16	Online
Colorado	CO	MP	015	610188	16	Online
Commonwealth of the Northern Mariana Islands	C7	W	016	507659	16	Online
Connecticut	CT	NE	017	610348	16	Online
Delaware	DE	MA	018	507678	16	Online
District of Columbia, Washington	DC	MA	019			
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	610296	16	Online
Georgia	GA	SE	024			
Guam	GU	W	025	507660	16	Online
Hawaii	HI	W	026			
Idaho	ID	W	027	610723	16	Online
Illinois	IL	MW	028	60876000	16	Online

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WIC State Agency	State Identifier Code	FNS Region	WIC Authority ID	IIN (BIN)	PAN length	Technology
Indian Township	I1	NE	030			
Indiana	IN	MW	029	636104	16	Online
Inter-Tribal Council Arizona (ITCA)	I4	W	031	608557	16	Online
Inter-Tribal Council Nevada (ITCN) <sup>1</sup>	I5	W	032	507715(89) J1	16	Online
Inter-Tribal Council Nevada (ITCN) 2018 IIN	I9	W	232	50771582	16	Online
Inter-Tribal Council of Oklahoma	I2	SW	033	610375	16	Online
Iowa	IA	MP	034	589026	16	Online
Kansas	KS	MP	035	608694	16	Online
Kentucky	KY	SE	036	606370	16	Online
Louisiana	LA	SW	037	610323	16	Smart Card
Maine	ME	NE	038	585991	16	Online
Maryland	MD	MA	039	610385	16	Online
Massachusetts	MA	NE	040	610320	16	Online
Michigan <sup>2</sup>	MI	MW	041	507711	16	Online
Minnesota	MN	MW	042	61072700	16	Online
Mississippi	MS	SE	043			
Mississippi Band of Choctaw Indians	C6	SE	012			
Missouri	MO	MP	044	581891	16	Smart Card
Montana	MT	MP	045	610318	16	Online
Muscogee Creek Nation	M2	SW	046	610376	16	Online
Navajo Nation	N2	W	047	507661	16	Online
Nebraska	NE	MP	048	560636	16	Online
Nevada <sup>1</sup>	NV	W	049	507715(80 thru 88)1	16	Online
Nevada 2018 IIN	NZ	W	249	50771582	16	Online
New Hampshire	NH	NE	050	61073000	16	Online
New Jersey	NJ	MA	051			
New Mexico <sup>2</sup>	NM	SW	052	586616	16	Smart Card
New York	NY	NE	053	610392	16	Online
North Carolina	NC	SE	054	507979	16	Online
North Dakota	ND	MP	055			
Northern Arapaho	N1	MP	056			
Ohio <sup>2</sup>	OH	MW	057	610309	16	Smart Card
Oklahoma	OK	SW	058	610304	16	Online
Omaha/Santee Sioux	O3	MP	060			
Oregon	OR	W	059	610287	16	Online
Osage Nation Tribal Council	O1	SW	061	610372	16	Online
Otoe-Missouria Tribe	O2	SW	062	610374	16	Online
Pennsylvania	PA	MA	063	610358	16	Smart Card
Pleasant Point	P1	NE	064			

WIC State Agency	State Identifier Code	FNS Region	WIC Authority ID	IIN (BIN)	PAN length	Technology
Pueblo of Isleta	I3	SW	065	502804	16	Smart Card
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	608502	16	Online
South Dakota	SD	MP	075	610381	16	Online
Standing Rock Sioux Tribe	S6	MP	076			
Tennessee	TN	SE	077	610409	16	Online
Texas	TX	SW	078	507717	19	Smart Card
Three Affiliated Tribe	T1	MP	079			
Utah	UT	MP	080			Smart Card
Ute Mountain Ute Tribe	U1	MP	081			Online
Vermont	VT	NE	082	610350	16	Online
Virgin Islands	VI	MA	084	610386	16	Online
Virginia	VA	MA	083	610277	16	Online
Washington	WA	W	085	605860	16	Online
West Virginia	WV	MA	087	610263	16	Online
Wichita, Caddo, and Delaware Tribes (WCD) Enterprises	W1	SW	086	504160	16	Online
Winnebago Tribe	W2	MP	088			
Wisconsin	WI	MW	089	585992	16	Online
Wyoming <sup>2</sup>	WY	MP	090	505349	16	Smart Card

<sup>1</sup>Note: grandfathered in sharing the same IIN (BIN) for WIC EBT cards. NV is using 50771582 and ITCN is using 50771583 since July 2017 in addition to 50771585 and 50771589.

<sup>2</sup>Note: grandfathered in sharing the same IIN (BIN) for WIC EBT cards with SNAP program.

**A.10 Compression code**

The *Compression code* data element is used in the file name to describe the method used to reduce the size of the file for transmission. Table 56 lists the *Compression code* values.

**Table 56 Compression code**

Value	Method	Description
A	ZIP (default)	Compression that produces files supporting the file format used in PKZip 2.4 applications
B	LHA/LZH	LHA or LZH freeware compression utility
C	TAR	UNIX utility that produces archive files. Note that TAR files are not compressed in size.
D	TAR/BZIP2	UNIX TAR archive utility provided by Berkeley Software Distribution
E	TAR GZ/GZIP	UNIX TAR archive utility provided with GNU/Linux

**A.11 WIC EBT US ASCII character set usage**

The *Item description* data element is used in the UPC/PLU store file (APL “D4” detail record and in WIC Online EBT in *EBT data* (bit 62) with the dataset identifiers “EA” balance information (bit 62-EA-3) and “ED” file update response data (bit 62-ED-3). The descriptions of food items provided in these data elements shall use only the printable characters in the US ASCII 128 character set shown in Table 57.

Table Legend:

- Char                The printed representation of the character, if any
- Dec                The decimal code for the character
- Row/Col            The decimal row/column representation for the character
- Oct                The octal (base 8) code for the character
- Hex                The hexadecimal (base 16) code for the character

Note: Code 32 (decimal) is a nonprinting spacing character. Codes 33 through 122 (decimal) are printable graphic characters marked below in gray.

**Table 57 WIC EBT usage of U.S. ASCII set**

Char	Dec	Col/Row	Oct	Hex	Name	Description
	0	00/00	0	0	NUL      (Ctrl-@)	NULL
	1	00/01	1	1	SOH      (Ctrl-A)	START OF HEADING
	2	00/02	2	2	STX      (Ctrl-B)	START OF TEXT
	3	00/03	3	3	ETX      (Ctrl-C)	END OF TEXT
	4	00/04	4	4	EOT      (Ctrl-D)	END OF TRANSMISSION
	5	00/05	5	5	ENQ      (Ctrl-E)	ENQUIRY
	6	00/06	6	6	ACK      (Ctrl-F)	ACKNOWLEDGE
	7	00/07	7	7	BEL      (Ctrl-G)	BELL (Beep)

	8	00/08	10	8	BS	(Ctrl-H)	BACKSPACE
	9	00/09	11	9	HT	(Ctrl-I)	HORIZONTAL TAB
	10	00/10	12	0A	LF	(Ctrl-J)	LINE FEED
	11	00/11	13	0B	VT	(Ctrl-K)	VERTICAL TAB
	12	00/12	14	0C	FF	(Ctrl-L)	FORM FEED
	13	00/13	15	0D	CR	(Ctrl-M)	CARRIAGE RETURN
	14	00/14	16	0E	SO	(Ctrl-N)	SHIFT OUT
	15	00/15	17	0F	SI	(Ctrl-O)	SHIFT IN
	16	01/00	20	10	DLE	(Ctrl-P)	DATA LINK ESCAPE
	17	01/01	21	11	DC1	(Ctrl-Q)	DEVICE CONTROL 1 (XON)
	18	01/02	22	12	DC2	(Ctrl-R)	DEVICE CONTROL 2
	19	01/03	23	13	DC3	(Ctrl-S)	DEVICE CONTROL 3 (XOFF)
	20	01/04	24	14	DC4	(Ctrl-T)	DEVICE CONTROL 4
	21	01/05	25	15	NAK	(Ctrl-U)	NEGATIVE ACKNOWLEDGE
	22	01/06	26	16	SYN	(Ctrl-V)	SYNCHRONOUS IDLE
	23	01/07	27	17	ETB	(Ctrl-W)	END OF TRANSMISSION BLOCK
	24	01/08	30	18	CAN	(Ctrl-X)	CANCEL
	25	01/09	31	19	EM	(Ctrl-Y)	END OF MEDIUM
	26	01/10	32	1A	SUB	(Ctrl-Z)	SUBSTITUTE
	27	01/11	33	1B	ESC	(Ctrl-[)	ESCAPE
	28	01/12	34	1C	FS	(Ctrl-\)	FILE SEPARATOR
	29	01/13	35	1D	GS	(Ctrl-])	GROUP SEPARATOR
	30	01/14	36	1E	RS	(Ctrl-^)	RECORD SEPARATOR
	31	01/15	37	1F	US	(Ctrl-_)	UNIT SEPARATOR
( )	32	02/00	40	20			SPACE
(!)	33	02/01	41	21			EXCLAMATION MARK
(")	34	02/02	42	22			QUOTATION MARK
(\$)	36	02/04	44	24			DOLLAR SIGN
(%)	37	02/05	45	25			PERCENT SIGN
(&)	38	02/06	46	26			AMPERSAND
(')	39	02/07	47	27			APOSTROPHE
(#)	35	02/03	43	23			NUMBER SIGN
(\$)	36	02/04	44	24			DOLLAR SIGN
(%)	37	02/05	45	25			PERCENT SIGN

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(&)	38	02/06	46	26			AMPERSAND
(')	39	02/07	47	27			APOSTROPHE
((	40	02/08	50	28			LEFT PARENTHESIS
))	41	02/09	51	29			RIGHT PARENTHESIS
(*)	42	02/10	52	2A			ASTERISK
(+)	43	02/11	53	2B			PLUS SIGN
(,)	44	02/12	54	2C			COMMA
(-)	45	02/13	55	2D			HYPHEN, MINUS SIGN
(.)	46	02/14	56	2E			PERIOD, FULL STOP
(/)	47	02/15	57	2F			SOLIDUS, SLASH
(0)	48	03/00	60	30			DIGIT ZERO
(1)	49	03/01	61	31			DIGIT ONE
(2)	50	03/02	62	32			DIGIT TWO
(3)	51	03/03	63	33			DIGIT THREE
(4)	52	03/04	64	34			DIGIT FOUR
(5)	53	03/05	65	35			DIGIT FIVE
(6)	54	03/06	66	36			DIGIT SIX
(7)	55	03/07	67	37			DIGIT SEVEN
(8)	56	03/08	70	38			DIGIT EIGHT
(9)	57	03/09	71	39			DIGIT NINE
(:)	58	03/10	72	3A			COLON
(;)	59	03/11	73	3B			SEMICOLON
(<)	60	03/12	74	3C			LESS-THAN SIGN, LEFT ANGLE BRACKET
(=)	61	03/13	75	3D			EQUALS SIGN
(>)	62	03/14	76	3E			GREATER-THAN SIGN, RIGHT ANGLE BRACKET
(?)	63	03/15	77	3F			QUESTION MARK
(@)	64	04/00	100	40			COMMERCIAL AT SIGN
(A)	65	04/01	101	41			CAPITAL LETTER A
(B)	66	04/02	102	42			CAPITAL LETTER B
(C)	67	04/03	103	43			CAPITAL LETTER C
(D)	68	04/04	104	44			CAPITAL LETTER D
(E)	69	04/05	105	45			CAPITAL LETTER E
(F)	70	04/06	106	46			CAPITAL LETTER F

(G)	71	04/07	107	47			CAPITAL LETTER G
(H)	72	04/08	110	48			CAPITAL LETTER H
(I)	73	04/09	111	49			CAPITAL LETTER I
(J)	74	04/10	112	4A			CAPITAL LETTER J
(K)	75	04/11	113	4B			CAPITAL LETTER K
(L)	76	04/12	114	4C			CAPITAL LETTER L
(M)	77	04/13	115	4D			CAPITAL LETTER M
(N)	78	04/14	116	4E			CAPITAL LETTER N
(O)	79	04/15	117	4F			CAPITAL LETTER O
(P)	80	05/00	120	50			CAPITAL LETTER P
(Q)	81	05/01	121	51			CAPITAL LETTER Q
(R)	82	05/02	122	52			CAPITAL LETTER R
(S)	83	04/03	123	53			CAPITAL LETTER S
(T)	84	05/04	124	54			CAPITAL LETTER T
(U)	85	05/05	125	55			CAPITAL LETTER U
(V)	86	05/06	126	56			CAPITAL LETTER V
(W)	87	05/07	127	57			CAPITAL LETTER W
(X)	88	05/08	130	58			CAPITAL LETTER X
(Y)	89	05/09	131	59			CAPITAL LETTER Y
(Z)	90	05/10	132	5A			CAPITAL LETTER Z
([)	91	05/11	133	5B			LEFT SQUARE BRACKET
(\)	92	05/12	134	5C			REVERSE SOLIDUS (BACKSLASH)
(])	93	05/13	135	5D			RIGHT SQUARE BRACKET
(^)	94	05/14	136	5E			CIRCUMFLEX ACCENT
(_)	95	05/15	137	5F			LOW LINE, UNDERLINE
(`)	96	06/00	140	60			GRAVE ACCENT
(a)	97	06/01	141	61			SMALL LETTER a
(b)	98	06/02	142	62			SMALL LETTER b
(c)	99	06/03	143	63			SMALL LETTER c
(d)	100	06/04	144	64			SMALL LETTER d
(e)	101	06/05	145	65			SMALL LETTER e
(f)	102	06/06	146	66			SMALL LETTER f
(g)	103	06/07	147	67			SMALL LETTER g

(h)	104	06/08	150	68			SMALL LETTER h
(i)	105	06/09	151	69			SMALL LETTER i
(j)	106	06/10	152	6A			SMALL LETTER j
(k)	107	06/11	153	6B			SMALL LETTER k
(l)	108	06/12	154	6C			SMALL LETTER l
(m)	109	06/13	155	6D			SMALL LETTER m
(n)	110	06/14	156	6E			SMALL LETTER n
(o)	111	06/15	157	6F			SMALL LETTER o
(p)	112	07/00	160	70			SMALL LETTER p
(q)	113	07/01	161	71			SMALL LETTER q
(r)	114	07/02	162	72			SMALL LETTER r
(s)	115	07/03	163	73			SMALL LETTER s
(t)	116	07/04	164	74			SMALL LETTER t
(u)	117	07/05	165	75			SMALL LETTER u
(v)	118	07/06	166	76			SMALL LETTER v
(w)	119	07/07	167	77			SMALL LETTER w
(x)	120	07/08	170	78			SMALL LETTER x
(y)	121	07/09	171	79			SMALL LETTER y
(z)	122	07/10	172	7A			SMALL LETTER z
{}	123	07/11	173	7B			LEFT CURLY BRACKET, LEFT BRACE
	124	07/12	174	7C			VERTICAL LINE, VERTICAL BAR
}	125	07/13	175	7D			RIGHT CURLY BRACKET, RIGHT BRACE
~	126	07/14	176	7E			TILDE
	127	07/15	177	7F	RUB	(Ctrl-?)	RUBOUT (DELETE)

**A.12 WIC EBT processing codes**

The data element *Processing code* is used in WIC Online EBT messages (100/110, 200/210, 420/430, 800/810, 804/814) and in WIC files (Claim file “D4”, Auto-reconciliation file “D4” and State Benefit file “D4”). The *Processing code* is a constructed data element made up of the *Transaction type code*, *Account type code 1* and *Account type code 2* as described in X9.93 Part 1. Table 58 shows the values used in WIC EBT processing and SNAP processing. Values not shown are reserved.

**Table 58 WIC EBT Processing code usage**

	Transaction type code	Account type code 1	Account type code 2	Description

	Transaction type code	Account type code 1	Account type code 2	Description
POS transactions	00	00	00	Cash purchase
	00	96	00	Benefit cash purchase
	00	97	00	WIC benefit purchase
	00	98	00	Benefit SNAP purchase
	01	96	00	Benefit cash withdrawal
	02	97	00	WIC benefits authorized for load*
	09	96	00	benefit purchase with cash back
	20	00	96	Benefit cash return
	20	97	00	WIC remove benefits*
	20	00	98	benefit SNAP return
	22	97	00	WIC benefits loaded*
	30	97	00	WIC benefits calculated balance
	31	00	00	benefit balance inquiry
	31	96	00	cash balance inquiry
	31	97	00	WIC benefit balance inquiry prior to benefit load*
ATM transactions	01	00	00	withdrawal from cash account
	01	10	00	withdrawal from checking account
	01	20	00	withdrawal from savings account
	01	30	00	withdrawal from DDA account
	31	10	00	balance inquiry for cash account
	31	20	00	balance inquiry for checking account
	31	30	00	balance inquiry for savings account

\*use in remote download in smart card WIC EBT

**A.13 File name**

Table 59 lists the *File names* used in super header and header records and identifies their usage by the type of transaction processing used and whether the error processing described in Section 8.3 in X9.93 Part 2 Files applies.

**Table 59 File name values**

Name	Description	Usage
ACKNOWLEDGMENT FILE	The Acknowledgment File is the vehicle by which file disposition is communicated to the sender.	WIC EBT Smart Card processing, error processing
AGGREGATE AUTO-RECON FILE	A WIC auto-reconciliation file containing multiple auto-reconciliation files	WIC EBT Online processing (optional), error processing

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Name	Description	Usage
AGGREGATE CLAIM FILE	A WIC claim extraction file containing multiple claim files	WIC EBT Smart Card processing(optional), error processing
AUTO-RECONCILIATION FILE	The Auto Reconciliation File assists Acquirers in resolving discrepancies between the EBT card issuer processor and the Acquirer. The file contains the final disposition of all transactions received by the ET card issuer processor from the Acquirer.	WIC EBT Smart card processing and WIC EBT Online processing (optional), error processing
HOTLIST REPLACEMENT FILE	The HOTList Replacement File provides a file of the WIC card numbers that have had their status changed from active to lost or stolen	WIC EBT Smart Card processing
TXNS-ONLY AUTO-RECON File	A WIC auto-reconciliation file containing transactions from multiple auto-reconciliation files	WIC EBT Online processing (optional), error processing
TXNS-ONLY CLAIM FILE	A WIC claim extraction file containing transactions from multiple claim files.	WIC EBT Smart Card processing (optional), error processing
UPC/PLU STORE FILE	The UPC/PLU store file contains the codes for all of the food items that are available for purchase under a specific state WIC program	WIC EBT Online and WIC EBT Smart Card processing
WIC CLAIM FILE	The WIC Claim extraction file contains the details of the WIC transactions processed by the Acquirer.	WIC EBT Smart Card processing, error processing
REMOTE BENEFITS AVAILABLE	The WIC Remote Benefits Available file contains transactions to update the benefits on a card.	WIC EBT Smart Card processing
REMOTE BENEFITS LOADED	The WIC Remote Benefits Loaded file contains transactions performed by the remote issuer when benefits on a card were updated	WIC EBT Smart Card processing

### A.14 Message type

The *Message type* data element is composed of 4 digits with the first digit indicating the version of the X9.93-2 standard used. The *Version number* corresponds to the *File format version* number value. The remaining 3 digits are the *Message type identifier* and conform to the *Message type identifier* descriptions in ISO 8583:1993 and X9.93-1. Table 60 shows which *Message type identifiers* are used in the detail records (“D4” and “D5”) within files. Version 4 (aka v4) smart card implementations use message type “1XXX”, file format version “04”.

**Table 60 Message type identifiers**

File name	Message type identifier								
	110	210	220	230	304	314	344	420	430
AUTO RECONCILIATION FILE	X	X		X				X	X
ACKNOWLEDGMENT FILE							X		
AGGREGATE CLAIM FILE				X					
HOTLIST REPLACEMENT FILE							X		
UPC/PLU STORE FILE							X		
WIC CLAIM FILE				X*					
REMOTE BENEFITS AVAILABLE					X				
REMOTE BENEFITS LOADED						X			
TXNS-ONLY CLAIM FILE				X*					

\*In Smart Card WIC EBT, the claim extraction file contains completed purchase transactions coded with 1230 and reversals coded with 1430 message types.

**A.15 Unit of measure (“D4” and “D6” UPC/PLU records and bit 62-EA-12)**

The *Unit of measure* data element is used in the UPC/PLU store file (APL) “D4” and “D6” records and in WIC Online EBT in *EBT data* (bit 62) with the dataset identifier “EA” (bit 62-EA-12). The values shown in Table 61 for the *Unit of measure* shall be used to identify the quantity of the food item as described on the food package, i.e., a nutrition label for peanut butter indicating the package is “8 ounces” would have a *Unit of measure* of “ounce” or “oz”. State agencies may use Table 54, Benefit Unit Description. See A.8 .

**Table 61 Unit of measure values**

Value	Abbreviation
Gram	g
Liter	L
Ounce	oz
Pound	lb
Quart	qt
Dollar value*	\$\$\$
Dozen*	DOZ

\*Values added that are not contained in ANS 260.1 associated with CVB & eggs.

**A.16 Price type**

Table 62 identifies the *Price type* codes used in UPC/PLU detail records.

**Table 62 Price type values**

Code	Description
00	Price not disclosed (default)
01	Maximum price allowed for this item
02	Contractual price for this item
03	Cash Value Benefit item (quantity equal to \$0.01) No maximum price
04-25	Reserved for national use
26-99	Reserved for private use
AA-ZZ	Reserved for national use

Annex B - Samples of Reversal File Records

Rec ID	Rec Seq	Msg Type	WIC Merchant ID	Card Acc ID	PAN Length	PAN	Proc Code	Trans Amt	Sys Trace	Transmission	Transaction Dt	POS Data code	Acquiring IIC	Card Acc Term	Card Acc Name/Location	cont ->
D4	000002	1430	999W	000099910000306	19	5077171021805800028	009700	000000000000	104168	0509191802	2016050913100	510111111334	000000000000	1	Texas WIC 4616 W. Howard Lane Austin	
D4 Record Continued ----->																
			Postal	Region	Country	Card Acc Add Descrp	Item Ct	Ben Issu Entity	First Dt to Spend	Amount Discount	IIC data		GMT Offset			
			78728	TX	USA		002	750011605011046	20160501	000000000000	8101158204A51CC23C830400000002884049955353D		0500			
Rec ID	Rec Seq	Add Seq	Cat Code	Subcat Code	Units	UPC	Purch Qty	Claim Price	Data Length	Amt Item Discount						
E3	000002	001	19	000	00099	1000000000004011	00099	00000	05	000000000000						
E3	000002	002	11	414	00200	0000007007455958	00200	00000	12	000000000000						

104168

Rec ID	Rec Seq	Msg Type	WIC Merchant ID	Card Acc ID	PAN Length	PAN	Proc Code	Trans Amt	Sys Trace	Transmission	Transaction Dt	POS Data code	Acquiring IIC	Card Acc Term	Card Acc Name/Location	cont ->
D4	000003	1430	999W	000099910000306	19	5077171021805802024	009700	000000000000	104169	0509191802	2016050913101	510111111334	000000000000	1	Texas WIC 4616 W. Howard Lane Austin	
D4 Record Continued ----->																
			Postal	Region	Country	Card Acc Add Descrp	Item Ct	Ben Issu Entity	First Dt to Spend	Amount Discount	IIC data		GMT Offset			
			78728	TX	USA		003	750011605011046	20160501	000000000000	8101158204DBA0F17683040000000284041AD48BC0		0500			
Rec ID	Rec Seq	Add Seq	Cat Code	Subcat Code	Units	UPC	Purch Qty	Claim Price	Data Length	Amt Item Discount						
E3	000003	001	19	000	00099	1000000000004011	00099	00000	05	000000000000						
E3	000003	002	17	000	00100	0000001500000415	00100	00000	12	000000000000						
E3	000003	003	05	000	01800	0000003800000120	00100	00000	12	000000000000						

Reversal with subsequent WIC tender - Trace # 104169

Subsequent WIC tender after reversal - Trace #104169

Rec ID	Rec Seq	Msg Type	WIC Merchant ID	Card Acc ID	PAN Length	PAN	Proc Code	Trans Amt	Sys Trace	Transmission	Transaction Dt	POS Data code	Acquiring IIC	Card Acc Term	Card Acc Name/Location	cont ->
D4	000004	1230	999W	000099910000306	19	5077171021805802024	009700	000000000545	104169	0509191802	2016050913111	510111111334	000000000000	1	Texas WIC 4616 W. Howard Lane Austin	
D4 Record Continued ----->																
			Postal	Region	Country	Card Acc Add Descrp	Item Ct	Ben Issu Entity	First Dt to Spend	Amount Discount	IIC data		GMT Offset			
			78728	TX	USA		002	750011605011046	20160501	000000000000	810108204DBA0F17683040000000484045A87FC8A		0500			
Rec ID	Rec Seq	Add Seq	Cat Code	Subcat Code	Units	UPC	Purch Qty	Claim Price	Data Length	Amt Item Discount						
E3	000004	001	17	000	00100	0000001500000415	00100	00099	12	000000000000						
E3	000004	002	05	000	01800	0000003800000120	00100	00446	12	000000000000						

Rec ID	Rec Seq	Msg Type	WIC Merchant ID	Card Acc ID	PAN Length	PAN	Proc Code	Trans Amt	Sys Trace	Transmission	Transaction Dt	POS Data code	Acquiring IIC	Card Acc Term	Card Acc Name/Location	cont ->
D4	000005	1430	999W	000099910000306	19	5077171021805801026	009700	000000000000	104170	0509191802	20160509131215	51011111334	00000000000	1	Texas WIC 4616 W. Howard Lane Austin	
D4 Record Continued ----->			Postal	Region	Country	Card Acc Add Descr	Item Ct	Ben Issu Entity	First Dt to Spend	Amount Discount	IIC data		GMT Offset			
			78728	TX	USA		005	750011605011046	20160501	000000000000	8101158204A3E11A328304000000028404E1202309		0500			

Multiple-reversal(1) with subsequent WIC tender - Trace #104170

Rec ID	Rec Seq	Add Seq	Cat Code	Subcat Code	Units	UPC	Purch Qty	Claim Price	Data Length	Amt Item Discount
E3	000005	001	19	000	00099	1000000000004015	00099	00000	05	000000000000
E3	000005	002	51	000	00100	0000001111040101	00100	00000	12	000000000000
E3	000005	003	05	000	01800	0000003800000120	00100	00000	12	000000000000
E3	000005	004	06	002	00100	0000005150024128	00100	00000	12	000000000000
E3	000005	005	02	012	00100	0000005283311151	00100	00000	12	000000000000

Rec ID	Rec Seq	Msg Type	WIC Merchant ID	Card Acc ID	PAN Length	PAN	Proc Code	Trans Amt	Sys Trace	Transmission	Transaction Dt	POS Data code	Acquiring IIC	Card Acc Term	Card Acc Name/Location	cont ->
D4	000006	1430	999W	000099910000306	19	5077171021805801026	009700	000000000000	104170	0509191802	20160509131415	51011111334	00000000000	1	Texas WIC 4616 W. Howard Lane Austin	
D4 Record Continued ----->			Postal	Region	Country	Card Acc Add Descr	Item Ct	Ben Issu Entity	First Dt to Spend	Amount Discount	IIC data		GMT Offset			
			78728	TX	USA		005	750011605011046	20160501	000000000000	8101158204A3E11A328304000000048404E1202309		0500			

Multiple-reversal(2) with subsequent WIC tender - Trace #104170

Rec ID	Rec Seq	Add Seq	Cat Code	Subcat Code	Units	UPC	Purch Qty	Claim Price	Data Length	Amt Item Discount
E3	000006	001	19	000	00099	1000000000004015	00099	00000	05	000000000000
E3	000006	002	51	000	00100	0000001111040101	00100	00000	12	000000000000
E3	000006	003	05	000	01800	0000003800000120	00100	00000	12	000000000000
E3	000006	004	06	002	00100	0000005150024128	00100	00000	12	000000000000
E3	000006	005	02	012	00100	0000005283311151	00100	00000	12	000000000000

Rec ID	Rec Seq	Msg Type	WIC Merchant ID	Card Acc ID	PAN Length	PAN	Proc Code	Trans Amt	Sys Trace	Transmission	Transaction Dt	POS Data code	Acquiring IIC	Card Acc Term	Card Acc Name/Location	cont ->
D4	000006	1230	999W	000099910000306	19	5077171021805801026	009700	000000001712	104170	0509191802	20160509131515	51011111334	00000000000	1	Texas WIC 4616 W. Howard Lane Austin	
D4 Record Continued ----->			Postal	Region	Country	Card Acc Add Descr	Item Ct	Ben Issu Entity	First Dt to Spend	Amount Discount	IIC data		GMT Offset			
			78728	TX	USA		005	750011605011046	20160501	000000000000	8101008204A3E11A328304000000068404E1202309		0500			

Subsequent WIC tender after multiple-reversals - Trace #104170

Rec ID	Rec Seq	Add Seq	Cat Code	Subcat Code	Units	UPC	Purch Qty	Claim Price	Data Length	Amt Item Discount
E3	000006	001	51	000	00100	0000001111040101	00100	00499	12	000000000000
E3	000006	002	05	000	01800	0000003800000120	00100	00446	12	000000000000
E3	000006	003	06	002	00100	0000005150024128	00100	00272	12	000000000000
E3	000006	004	02	012	00100	0000005283311151	00100	00496	12	000000000000

## **Annex C - Version 4 (V4) considerations**

**Claim Submission File** - The compressed file that is uploaded the FTP site for each State agency is called a Claim Submission, regardless of the claim file format version being used – single, transaction or aggregate claim. A Claim Submission File shall contain at least one v4 Extraction File. At a minimum, a Claim Submission File must contain only one Extraction File, but multiple v4 Extraction Files within a Claim Submission File may be supported at the WIC State Agency’s option.

**Extraction File** - To get the files to a readable form from the compressed Claim Submission File, the v4 files (referenced in the TIG as WIC Claim Submission files) must be retrieved from a v4 Claim Submission using a decompression tool. These decompressed files are referred to as Extraction Files. See file processing options in 10.2 and compression codes in A.10. State agencies will not support all compression methods – contact the WIC agency or its processor for details.

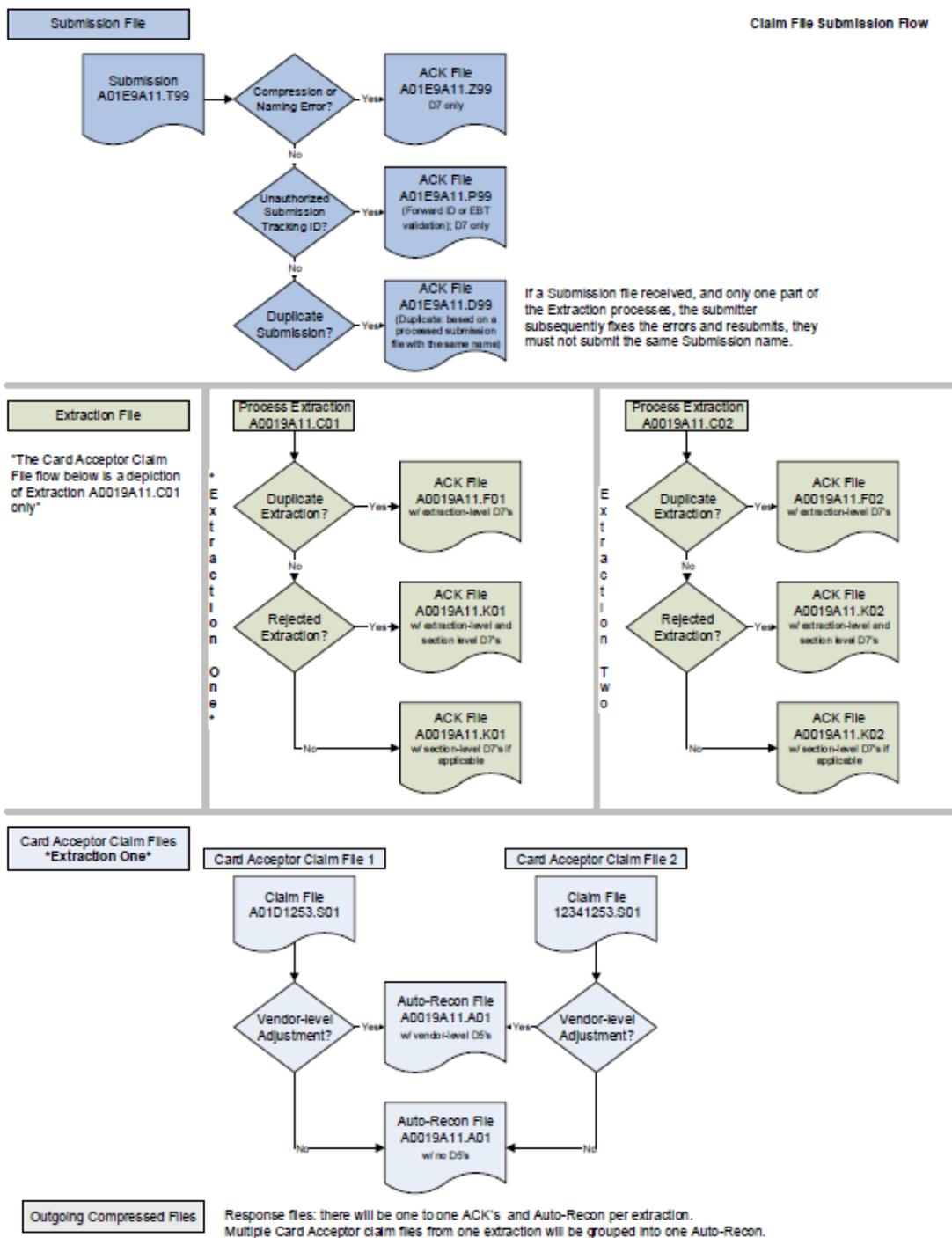
Decompression of a v4 Claim Submission File will result in at least one Extraction File. In V4, the Extraction File will have a different name from the Claim Submission File. The Claim Submission File and its Extraction File(s) are separate and distinct entities. V4 Extraction Files must be provided in one of three forms described in v4 – a single claim file for one card acceptor ID or WIC vendor location, or Transaction or Aggregate claim files for multiple card acceptor IDs or WIC vendor locations.

**Message and File Format Version** – v4 has implemented using the 8583-1993 which uses “1230” for a completed purchase and “1430” for reversals in a claim extraction file D4 record and any reversal in the auto-reconciliation file.

**UPC/PLU file** – v4 adopts the purchase indicator for APL files (aka UPC/PLU files). Support for backward compatibility to the v2 format (with duplicate UPCs for any UPC redeemable in ‘000’ broadband subcategory) will cease per agreement with each State agency regarding the implementation date. March 1, 2018 is the current regulatory implementation date unless an alternate date is approved by FNS. The regulatory requirement applies to both online and smart card technologies.

**WIC Acknowledgement File** – if a claim file has no errors to report, at State agency option, no Acknowledgement file will be sent.

## Annex D - V4 File Processing Flow



## **Annex E - Smart Card Security**

Under the WIC Smart Card EBT system, the food balances (prescription) are maintained and updated on the EBT smart card chip. To get paid for approved purchases, the WIC vendor creates a claim file which is submitted to the State agency daily. The EBT host processes the claim files by checking to be sure the redemption information contains only State issued cards, the items match the current Authorized Product List and the WIC vendor was active at the time of purchase. Additional security measures are described below.

WIC State agencies will provide each terminal operator with a Production Mother Authentication key (MKAuthentication) and Production Mother Secret codes (WICSC5 and WICSC6). Industry standard practices are used by State agencies for key management. These keys and secret codes are used to authenticate the card, validate the PIN, and obtain balance information and update the food balances contained in restricted access files on the smart card.

### **Terminal Encryption Keys**

Each State agency will provide an authentication key (MKAuthentication) and two secret codes (MSCWICSC5 and MSCWICSC6) to permit card authentication and read/update access to the card files. These keys and secret codes must be stored in a tamper resistant area of the PIN pad or equivalent device of the card terminal in the grocery lane.

### **Card Authentication**

To verify that an EBT smart card inserted into the vendor POS terminal is a valid State agency card (not counterfeit or a test card), the terminal software must generate an 8 digit random number to the EBT card with an instruction to *IntAut* (Internal Authentication). To complete Internal Authentication, the card security module will use a 3DES encryption key to generate a cryptogram stored in the RAM. The terminal then requests a 'Get Response' instruction to obtain the last 4 digits of the cryptogram. Using the MKAuthentication key, the POS terminal will calculate the cryptogram and compare it to the card cryptogram. If a match exists, the card is authenticated.

Two additional steps include validating the check sum digit and matching the Issuer Identification Number (IIN). The PAN is validated by computing the check sum digit since EBT cards must be Mod-10 compliant. The PAN check sum digit is calculated and matched by the terminal. The POS terminal will also verify that the IIN matches the IIN for the State agency who issued the card. If not matched as an IIN supported by the vendor location, the redemption using the card is not allowed.

### **Validate PIN**

The WIC cardholder must authenticate to the EBT card by entering a Personal Identification Number (PIN) in the PIN pad device at the checkout lane. This device must contain a hardware security module to ensure the PIN is not in the clear when it is sent to the EBT card. The terminal supplies a data file containing the PIN to a secure file area of the EBT card. If the PIN matches, the benefit redemption process continues. If it does not match, a prompt to enter a valid PIN is provided.

### **Transaction Signature**

The transaction signature prevents modification (tampering) of redemption details contained in a claim file. The unique transaction signature is created during the redemption process and then verified during claims processing at the EBT host operated by the State agency or its contractor. The transaction signature uses an algorithm with a cryptographic key residing on the card to create a unique electronic signature for each purchase. The signature is later recalculated by the EBT host based on the transaction records submitted in the claim file. If the recalculated

transaction signature matches the signature contained in the claim file, the purchase will be further processed for approval.

Once a cardholder confirms a purchase at the POS terminal, the terminal software sends the food category, subcategory codes and purchase quantities to the EBT card to create a 3-part transaction signature.<sup>1</sup> The first part is called the CRC-32 or Cyclical Redundancy Check. The second part is called the Card Transaction Counter. The third part is called the Card signature Certificate (CSC). Examples of the three parts to the transaction signature are presented below:

**CRC-32**

Example 2 shows how data is reordered in the Input Utilization String.

Example	WIC Item Code	Units Sold	Input Utilization String	Hexadecimal equivalent	Resulting CRC32
1	01-002	0800	'010020080003001005001500002450'	0x303130303230303830303033303031303035303031353030303032343530	0x642214A7
	03-001	0500			
	15-000	1000			
2	07-001	03500	'050340350007001010001599753020'	0x303530333430333530303037303031303130303031353939373533303230	0xBA00C084
	05-034	03500			
	15-997	53020			

**CTC**

The EBT smart card stores a 4-byte Card Transaction Counter (CTC). The CTC is incremented by 1 for each successful card transaction (when updated benefits are written to the chip). The POS terminal reads the CTC from the card by sending a *Read Binary (RdBin)* instruction.

Example	CTC Value in <i>RdBin</i> Instruction response	CTC Response	CTC Stored in POS Terminal	Final CTC after card update
1	0x000000001	0x00000001	0x00000001	0x00000001
2	0x000000009	0x0000000A	0x0000000A	0x0000000A
3	0x00000001F	0x00000020	0x00000020	0x00000020

**CSC**

To obtain a Card Signature Certificate, the POS terminal submits a *Input Data-block* to the EBT card, byte order unaltered with an *Internal Authentication (IntAut)* instruction. The Input Data block is structured as follows using the CRC32 and CTC obtained from the card:

Example	CRC32 [3-0]	CTC [3-0]	Input Data-block [7-0]							
			B7	B6	B5	B4	B3	B2	B1	B0
1	0x642214A7	0x00000001	64	22	14	A7	00	00	00	01
2	0xBA00C084	0x0000000A	BA	00	C0	84	00	00	00	0A
3	0x014BE053	0x00000020	01	4B	E0	53	00	00	00	20

<sup>1</sup> The benefits utilization data is converted from ASCII text to Hexadecimal and formatted in ascending order before being presented to the EBT card. Card responses are in Hexadecimal format.

### **ICC System Related Data**

In the claim file records, a field called ICC System Related Data (PICX99) is populated in the claim file detail record (D4) with the transaction signature created by the EBT card for each approved purchase. Security information in this field consists of the CRC32, CTC, and CSC. In addition, the field contains the Integrated circuit card (ICC) result code (formerly called the Point of Sale Condition Code or POSCC). See A.2 for the codes. The transaction signature data is concatenated in a Tag, Length, and Value (TLV) format required by ISO-7816 (the international smart card standard).

The first data element, the ICC, is required and is expressed as a 1-byte Hexadecimal number that must be identified with TAG 0x81 and Length 0x01. The CRC32, CTC and CSC each is expected to be a 4 byte Hexadecimal number and must be identified with Tag 0x82 and Length 0x04; Tag 0x83 and Length 0x04; and Tag 0x84 and Length 0x04, respectively. Once concatenated, the field is right padded with spaces to length.

The order for concatenation is: {T1L1V1} + {T2L2V2} + {T3L3V3} + {T4L4V4} + {Padding}. Tag, Length, and Value are binary data to be represented in the Claim file. Two examples are below using POSCC Value 0x00, CRC32 value 0x642214A7, CTC value 0x00000001, and CSC value 0x00CF6CD4:

*Example 1 – Approved Transaction*

{0x00} + {0x642214A7} + {0x00000001} + {0x00CF6CD4}

*Example 2 – Denied Transaction – Cryptographically failed Transaction with POSCC 0x06*

{0x06} + {0x642214A7} + {0x00000001} + {0x00CF6CD4}

Further details on smart card encryption processes for developers may be obtained by contacting FNS or a WIC State agency for additional documentation. A signed Non-Disclosure Agreement will be required for access to this documentation.