

**CANADIAN PAYMENTS ASSOCIATION**  
**ASSOCIATION CANADIENNE DES PAIEMENTS**

**STANDARD 023**

**TECHNICAL REQUIREMENTS APPLICABLE TO  
ELECTRONIC DATA INTERCHANGE**

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**Standard 023 – Technical Requirements Applicable to Electronic Data Interchange**  
**Implementation and Revisions**

**Implemented**

August 25, 2014

(Note: CPA Standard 023 previously existed from November 18, 1992 to June 20, 1995)

**Amendments**



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- APPENDIX A** SPECIFICATIONS FOR EDI TRANSACTION SETS *(based on ASC X12 Version Release 003010)*
- APPENDIX B** SPECIFICATIONS FOR EDI TRANSACTION SETS *(based on ASC X12 Version Release 003020)*
- APPENDIX C** SPECIFICATIONS FOR EDI TRANSACTION SETS *(based on ASC X12 Version Release 003030)*
- APPENDIX D** SPECIFICATIONS FOR EDI TRANSACTION SETS *(based on ASC X12 Version Release 003040)*
- APPENDIX E** SPECIFICATION FOR EDI TRANSACTION SETS *(based on ASC X12 Version Release 003050)*



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This Standard is only available in English due to the fact that ASC X12 documentation must be referenced in conjunction with its use and that such documentation is only available in English.

### TECHNICAL RULES

#### 1. INTRODUCTION

As stated previously, the specifications in this Standard are based on the electronic data interchange (EDI) standards developed by ASC X12 of the American National Standards Institute (ANSI). Although these standards have been adapted to the Canadian environment, the ASC X12 terminology has been retained, wherever possible, to ensure consistency with ASC X12 documentation.

The sections of Standard 023 have been ordered to facilitate the ongoing review and maintenance required to upgrade the *Specifications for EDI Transaction Sets*. Accordingly, the specifications for transaction sets are located at the end of this Standard.

This section provides specifications for the format and use of EDI Transaction Sets that may be Exchanged between Canadian Financial Institutions, based on ASC X12 Version Release 004010.

The following appendices form part of this Standard:

Appendix A - Specifications for EDI Transaction Sets based on ASC X12 Version Release 003010

Appendix B - Specifications for EDI Transaction Sets based on ASC X12 Version Release 003020

Appendix C - Specifications for EDI Transaction Sets based on ASC X12 Version Release 003030

Appendix D - Specifications for EDI Transaction Sets based on ASC X12 Version Release 003040

Appendix E - Specifications for EDI Transaction Sets based on ASC X12 Version Release 003050



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**2. STANDARDS MAINTENANCE AND COMPLIANCE**

**2.1 INTRODUCTION**

This section provides a list of the ASC X12 version releases supported for Transaction Sets and data security standards between Direct and Indirect Participants together with guidelines for maintenance of existing version releases and introduction of new approved draft version releases.

**2.2 ASC X12 VERSION RELEASES SUPPORTED**

**2.2.1 Transaction Sets**

The following matrix lists the Transaction Sets and the ASC X12 version releases that shall be supported by Direct and Indirect Participants.

Transaction Set	003010	003020	003030	003040	003050	003060	003070	004010
820	S	S	S	S	S	N/S	N/S	S
997	S	S	S	S	S	N/S	N/S	S
824	S	S	S	S	S	N/S	N/S	S
827	N/S	N/S	N/S	N/S	N/S	N/S	N/S	S
829	N/S	N/S	N/S	N/S	N/S	N/S	N/S	S

S	-	Supported
N/S	-	Not supported

**2.2.2 Principles - Version Releases**

- (a) All Direct and Indirect Participants shall support and exchange all CPA approved Transaction Sets and security standards at all version releases as per 5.2.1 above.
- (b) The Originating Direct Participant shall transmit Transaction Sets to the Receiving Direct Participant in the same version release level it was received from the Originator, provided it is a supported version release. Where the Originating Direct Participant receives Transaction Sets in an unsupported version release, it shall pass the Transaction Sets to the Receiver in a supported version release.
- (c) Notwithstanding (b) above, if the Receiver is unable to receive the Transaction Set at the version release initiated by the Originator, the Receiving Direct Participant may translate the transaction to the relevant version release for its Receiver.
- (d) Sub-releases to the ASC X12 standards shall not be supported.



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### 2.3 MAINTENANCE OF EXISTING CPA APPROVED VERSION RELEASES

#### 2.3.1 Changes

A CPA Member may submit in writing a recommended change to existing CPA approved version-release documented specifications, accompanied by a detailed business rationale. The recommendation shall be reviewed and may be approved by the CPA. If so approved, the CPA will attempt to obtain a consensus among Members as to the required timeframe for compliance. If no consensus can be reached, the CPA may impose a timeframe for compliance.

#### 2.3.2 Old Version Releases

A CPA Member, or the CPA on its own initiative, may recommend that Direct and Indirect Participants no longer support a particular version release. If the CPA determines, in its discretion, that a relevant version release shall be deleted from the CPA approved list, it shall attempt to obtain a consensus among Members as to the required timeframe for deletion. If no consensus can be reached, the CPA may impose a timeframe for deletion.

Any new EDI participant shall not be required to support and exchange at the particular version release which is designated for withdrawal 12 months prior to its deletion from the CPA approved list of version releases supported.

### 2.4 GUIDELINES FOR INTRODUCTION OF NEW VERSION-RELEASE

- (a) Once a new version release is published by ASC X12, the CPA shall assess all issues arising from the new version release, and shall adapt it to Canadian financial institution requirements, if necessary.
- (b) Once assessed and adapted (if necessary) pursuant to (a), each new version release shall be submitted to the CPA Board of Directors for approval and incorporation in the CPA Rules Manual.
- (c) All new version releases incorporated into the CPA Rules Manual shall be supported by all Direct and Indirect Participants subject to d) and e) below.
- (d) Once a new version release is approved by the CPA Board of Directors, the previous version release shall be attached as an appendix to this Standard, and may be used by CPA members, until such time as it may be deleted pursuant to Section 2.3.2.
- (e) Direct and Indirect Participants support of a new version release shall be within 6 months after approval of the CPA Board of Directors. The CPA may recommend an alternative timeframe based upon the magnitude of the changes.



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### 3. SPECIFICATIONS FOR EDI TRANSACTION SETS (*based on ASC X12 Version Release 004010*)

For **Specifications for EDI Transaction Sets based on ASC X12 Version Release 003010**, refer to Appendix A of Standard 023.

For **Specifications for EDI Transaction Sets based on ASC X12 Version Release 003020**, refer to Appendix B of Standard 023.

For **Specifications for EDI Transaction Sets based on ASC X12 Version Release 003030**, refer to Appendix C of Standard 023.

For **Specifications for EDI Transaction Sets based on ASC X12 Version Release 003040**, refer to Appendix D of Standard 023.

For **Specifications for EDI Transaction Sets based on ASC X12 Version Release 003050**, refer to Appendix E of Standard 023.

#### 3.1 INTRODUCTION

A high degree of standardization of messages and message flows is essential for effective communication between participants in EDI. This section provides specifications for the format and use of EDI Transaction Sets that may be Exchanged between Canadian Financial Institutions.

The following Transaction Sets are addressed in these specifications:

- Envelope Segments: ISA, IEA, GS and GE;
- Transaction Set Header and Trailer: ST and SE;
- 820 - Payment Order/Remittance Advice;
- 824 - Application Advice;
- 997 - Functional Acknowledgment; and
- Security Structures: S1S, S1E, S2S and S2E.

The formats of the Canadian enveloping segments, the 820, the 824, and the 997 Transaction Sets, comply with the ASC X12 Draft Standards for Trial Use, Version Release 004010, published in December 1997 (ASC X12S/97-372).



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BASED ON ASC X12 VERSION

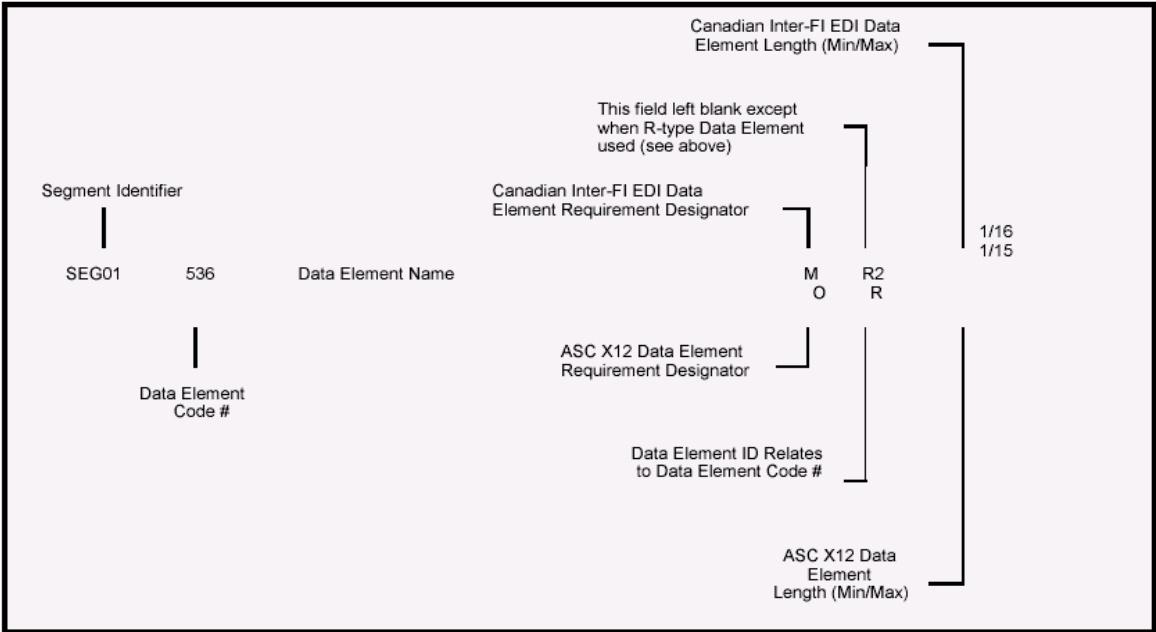


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**3.2 NOTATION CONVENTION**

This section defines the specifications for EDI Transaction Sets resulting in Payment Items Exchanged between Canadian Financial Institutions. The diagrams and tables used within this section to explain the data element requirements are similar to those used in the relevant ASC X12 documentation. In the segment sequence table for each Transaction Set, there are two pairs of columns that indicate ASC X12 and Canadian inter-financial institution EDI requirements. All Canadian requirements for data element usage and length are **highlighted**; the data segment usage is highlighted only when it differs from ASC X12.

In the segment sequence tables, Canadian inter-financial institution EDI requirements for data element requirement designator and length will appear above the ASC X12 specified requirement designator and length. For inter-financial institution EDI in Canada, the maximum number of decimal places for R-type data elements is illustrated in the example below:



A data element is assigned one of the following three requirement designators specifying its need to appear within the segment. The requirement designators shown below are each followed by their abbreviation in parentheses.

- **Mandatory (M)**

This element is required to appear in the segment.

- **Relational (X)**

Relational conditions may exist between two or more data elements within a segment based on the presence or absence of one of those data elements.



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The conditional relation is provided in the syntax note.

- **Optional (O)**

The appearance of this data element is at the option of the Originator or is based on the mutual agreement of the Direct and Indirect Participants.

- **Ignore (I)**

The Receiving Direct Participant may choose to ignore or drop any information contained in this Data Element.

### 3.3 BASIC EDI CONVENTIONS

Direct and Indirect Participants are required to adhere to the following conventions in relation to all EDI structures, segments, Transaction Sets and elements:

- (i) Data Element separators and minimum/maximum Data Element lengths must be used so that the required data can be recorded in the minimum amount of space in each Data Element. Trailing spaces should only be used to satisfy minimum length requirements. The exception to the foregoing is the ISA segment in which all Data Elements are mandatory and of fixed length.
- (ii) The composite data structure is an intermediate unit of information in a segment. A composite data structure consists of two or more component Data Elements preceded by a Data Element separator. In use, in the actual data stream, a composite data structure may appear as only one component Data Element. Each component Data Element within the composite data structure, except the last, is followed by a component Data Element separator. The final component Data Element is followed by the next Data Element separator or the segment terminator.
- (iii) Unless otherwise specified, all R-type Data Elements that represent amounts of money are assumed to have a maximum of two decimal places. Whole dollars can be represented as integers without any decimal places (example: 123). Fractions of dollars must be represented with a decimal point and up to two decimal places (examples: 123.56 or 78.5). To indicate a negative amount, a minus sign shall precede the high-order digit of the figure (example: -123). The specified maximum length of each R-type data element includes a plus or minus sign and a decimal point. All R-type data elements that represent a quantity or count are assumed to be integers (i.e., no decimal places).  
  
All N-type Data Elements that represent control numbers must be positive numbers.
- (iv) All received transmissions must be validated against ASC X12 syntax rules and these specifications.



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The results of syntax checking for all types of Transaction Sets (except 997s) must be reported back to the Direct or Indirect Participant via a Functional Acknowledgment (997).

- (v) Further inspection is performed on the integrity of the data and the results must be reported back to the Direct or Indirect Participant via an Application Advice (824).

This checking must verify:

- (a) that the required combinations of codes and/or fields are present; and
- (b) that contradictory combinations do not exist.

After Data Elements or segments have passed syntax checking, they must be passed unchanged to the next party.

### 3.4 ENVELOPE SEGMENTS

The following diagram shows the enveloping used for all EDI Transaction Sets.

SEG. ID	NAME	ASC REQ.	X12 MAX.	CDN REQ.	FI MAX	COMMENTS
ISA	Interchange Control Header	M	1	M	1	
GS	Functional Group Header	M	1	M	1	Multiple functional groups may be in each communication envelope
ST	Transaction Set Header	M	1	M	1	
.	.					
.	xxx Segments for one set					
.	.					
SE	Transaction Set Trailer	M	1	M	1	Multiple transaction sets may be in each functional group
GE	Functional Group Trailer	M	1	M	1	
IEA	Interchange Control Trailer	M	1	M	1	

#### 3.4.1 ISA - Interchange Control Header

**Level:** Header

**Loop:** -----

**Usage:** **Mandatory**

**Max Use:** 1



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### 3.4.1 Data Element Summary (continued)

Ref. Des.	Data Element	Name	Attributes		
ISA01	I01 2/2	<b>Authorization Information Qualifier</b>	<b>M</b>	ID	2/2
		- Mandatory element. - Valid values specified in bilateral agreements. - Must be '00' when ISA02 is not being used.			
ISA02	I02	<b>Authorization Information</b>	<b>M</b>	AN	<b>10/10</b> 10/10
		- Mandatory element. - Valid values specified in bilateral agreements.			
ISA03	I03	<b>Security Information Qualifier</b>	<b>M</b>	ID	<b>2/2</b> 2/2
		- Mandatory element. - Valid values specified in bilateral agreements. - Must be '00' when ISA04 is not being used.			
ISA04	I04	<b>Security Information</b>	<b>M</b>	AN	<b>10/10</b> 10/10
		- Mandatory element. - Valid values specified in bilateral agreements.			
ISA05	I05	<b>Interchange ID Qualifier</b>	<b>M</b>	ID	<b>2/2</b> 2/2
		- Mandatory element. - Valid values specified in bilateral agreements. - Value may be communications network dependent.			
ISA06	I06	<b>Interchange Sender ID</b>	<b>M</b>	AN	<b>15/15</b> 15/15
		- Mandatory element. - Valid values specified in bilateral agreements. - Value may be communications network dependent.			
ISA07	I05	<b>Interchange ID Qualifier</b>	<b>M</b>	ID	<b>2/2</b> 2/2
		- Mandatory element. - Valid values specified in bilateral agreements. - Value may be communications network dependent.			
ISA08	I07	<b>Interchange Receiver ID</b>	<b>M</b>	AN	<b>15/15</b> 15/15
		- Mandatory element. - Valid values specified in bilateral agreements. - Value may be communications network dependent.			
ISA09	I08	<b>Interchange Date</b>	<b>M</b>	DT	<b>6/6</b> 6/6
		- Mandatory element. - Date when the envelope was created, in the format of YYMMDD.			
ISA10	I09	<b>Interchange Time</b>	<b>M</b>	TM	<b>4/4</b> 4/4
		- Mandatory element. - Time when the envelope was created, in the format of HHMM.			



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3.4.1 **Data Element Summary (continued)**

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>		
ISA11	I10	<b>Interchange Control Standards Identifier</b> - Mandatory element. - Must be `U'.	<b>M</b> M	ID	<b>1/1</b> 1/1
ISA12	I11	<b>Interchange Control Version Number</b> - Mandatory element. - Must be within the range of 00300 to 00401.	<b>M</b> M	ID	<b>5/5</b> 5/5
ISA13	I12	<b>Interchange Control Number</b> - Mandatory element. - Each envelope sent by a Direct or Indirect Participant must have a unique Interchange Control Number.	<b>M</b> M	NO	<b>9/9</b> 9/9
ISA14	I13	<b>Acknowledgment Requested</b> - Mandatory element. - Must be `0'	<b>M</b> M	ID	<b>1/1</b> 1/1
ISA15	I14	<b>Test Indicator</b> - Mandatory element. - Must be `P' (production). During testing, this element must be `T' (test) and actual payments must not be made.	<b>M</b> M	ID	<b>1/1</b> 1/1
ISA16	I15	<b>Component Element Separator</b> - Mandatory element. - Must have a different value than the element separator and the segment terminator to support future use of composite data elements. - Currently, this field shall be disregarded during processing.	<b>M</b> M	AN	<b>1/1</b> 1/1



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**3.4.2 GS - Functional Group Header**

**Level:** Header

**Loop:** \_\_\_\_\_

**Usage:** **Mandatory**

**Max Use:** 1

**Purpose:** To indicate the beginning of a functional group and to provide control information.

**Data Element Summary**

Ref.	Data Element	Name	Attributes		
GS01	479	<b>Functional Identifier Code</b>	<b>M</b>		<b>2/2</b>
			M	ID	2/2
		- Mandatory element. - This element corresponds to one of the following values depending on the transaction sets within the functional group:  RA - 820s; AG - 824s; or FA - 997s.			
GS02	142	<b>Application Sender's Code</b>	<b>M</b>		<b>2/15</b>
			M	AN	2/15
		- Mandatory element. - Content specified in bilateral agreements.			
GS03	124	<b>Application Receiver's Code</b>	<b>M</b>		<b>2/15</b>
			M	AN	2/15
		- Mandatory element. - Content specified in bilateral agreements.			
GS04	373	<b>Date</b>	<b>M</b>		<b>8/8</b>
			M	DT	8/8
		- Mandatory element. - Date when the functional group was created, in the format CCYYMMDD.			
GS05	337	<b>Time</b>	<b>M</b>		<b>4/8</b>
			M	TM	4/8
		- Mandatory element. - Time when the functional group was created, in the format HHMMSSDD (integer and decimal seconds are optional).			



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**3.4.2 Data Element Summary (continued)**

Ref. Des.	Data Element	Name	Attributes		
GS06	28	<b>Group Control Number</b>	<b>M</b>		<b>1/9</b>
			M	NO	1/9
		- Mandatory element. - Each functional group sent by a Direct or Indirect Participant must have a unique group control number by financial institution. All transaction sets within a functional group with duplicate group control numbers shall be rejected.			
GS07	455	<b>Responsible Agency Code</b>	<b>M</b>		<b>1/2</b>
			M	ID	1/2
		- Mandatory element. - Must be "X" (ASC X12).			
GS08	480	<b>Version/Release/Industry Identifier Code</b>	<b>M</b>		<b>1/12</b>
			M	AN	1/12
		- Mandatory element. - Must be "004010".			

**3.4.3 ST - Transaction Set Header**

**Level:** Header

**Loop:** \_\_\_\_\_

**Usage:** **Mandatory**

**Max Use:** 1

**Purpose:** To indicate the start of a Transaction Set and to assign a control number. The Transaction Sets supported by these specifications are found in the introduction to this section.

**Data Element Summary**

Ref. Des.	Data Element	Name	Attributes		
ST01	143	<b>Transaction Set Identifier Code</b>	<b>M</b>		<b>3/3</b>
			M	ID	3/3
		- Mandatory element. - Must specify one of the currently supported transaction sets.			
ST02	329	<b>Transaction Set Control Number</b>	<b>M</b>		<b>4/9</b>
			M	AN	4/9
		- Mandatory element. - Each transaction set within a functional group sent by a Direct or Indirect Participant must have a unique transaction set control number, assigned in ascending order. It is preferred that this number be incremented by one. Any transaction set within a functional group with the same transaction set control number as another transaction set in the same functional group shall be considered a duplicate and shall be rejected.			



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**3.4.4 SE - Transaction Set Trailer**

**Level:** Trailer

**Loop:** \_\_\_\_\_

**Usage:** **Mandatory**

**Max Use:** 1

**Purpose:** To indicate the end of a transaction set and to provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments).

**Data Element Summary**

Ref.	Data Des.	Element	Name	Attributes		
SE01		96	<b>Number of Included Segments</b>	<b>M</b>		<b>1/10</b>
				M	NO	1/10
			- Mandatory element. - Must be the sum of the number of segments within the transaction set. - If this element contains an incorrect number, the transaction set shall be rejected.			
SE02		329	<b>Transaction Set Control Number</b>		<b>M</b>	
4/9				M	AN	4/9
			- Mandatory element. - Must contain the same value found in the corresponding ST02.			

**3.4.5 GE - Functional Group Trailer**

**Level:** Trailer

**Loop:** \_\_\_\_\_

**Usage:** **Mandatory**

**Max Use:** 1

**Purpose:** To indicate the end of a functional group and to provide control information.

**Data Element Summary**

Ref.	Data Des.	Element	Name	Attributes		
GE01		97	<b>Number of Transaction Sets Included</b>	<b>M</b>		<b>1/6</b>
				M	NO	1/6
			- Mandatory element. - Must be the sum of the number of transaction sets within the functional group. - If this element contains an incorrect number, the functional group (all transaction sets within the functional group) shall be rejected.			
GE02		28	<b>Group Control Number</b>	<b>M</b>		<b>1/9</b>
				M	NO	1/9
			- Mandatory element. - Must contain the same value found in the corresponding GS06.			





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**3.4.6 IEA - Interchange Control Trailer**

**Level:** Trailer

**Loop:** \_\_\_\_\_

**Usage:** **Mandatory**

**Max Use:** 1

**Purpose:** To define the end of an interchange of zero or more functional groups and interchange-related control segments.

**Data Element Summary**

Ref.	Data Des.	Element	Name	Attributes		
IEA01		I16	<b>Number of Included Functional Groups</b>	<b>M</b>		<b>1/5</b>
				M	NO	1/5
			- Mandatory element. - Must be the sum of the number of functional groups within the envelope. - If this element contains an incorrect number, the functional groups within the envelope shall be rejected.			
IEA02		I12	<b>Interchange Control Number</b>	<b>M</b>		<b>9/9</b>
				M	NO	9/9
			- Mandatory element. - Must contain the same value found in the corresponding ISA13.			

**3.5 820 - PAYMENT ORDER/REMITTANCE ADVICE**

An 820 - Payment Order/Remittance Advice is sent by one financial institution to another financial institution to direct that FI to make a payment to a specified party.

The financial institution receiving the 820 shall verify syntax and payment-related information for each 820. If an 820 does not comply with these specifications, the 820 shall be rejected and reported back to the FI originating the 820 Transaction Set by a negative 997, negative 824, or both.

820s are packaged into Functional Groups with a functional identifier code (GS01) of 'RA'. The maximum number of 820s in a functional group must not exceed 999,999; and the maximum number of segments within an 820 must not exceed 9,999,999,999.



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**HEADER/TABLE 1**

Pos. No.	Seq. ID	Name	ASC Req.	X12 Max.	CDN Req.	FI Max	Loop Name/ Repeat	Comments
010	ST	Transaction Set Header	M	1	M	1		
020	BPR	Beginning Segment for Payment Order/ Remittance Advice	M	1	M	1		
030	NTE	Note/Special Instruction	O	>1	O	>1		
035	TRN	Trace	O	1	M	1		
040	CUR	Currency	O	1	O	1		
050	REF	Reference Numbers	O	>1	M	>1		
060	DTM	Date/Time Reference	O	>1	O	>1		
070	N1	Name	O	1	M	1	>1	Two N1 loops are mandatory
080	N2	Additional Name Information	O	>1	O	>1		
090	N3	Address Information	O	>1	O	>1		
100	N4	Geographic Location	O	1	O	1		
110	REF	Reference Numbers	O	>1	O	>1		
120	PER	Administrative Communications Contact	O	>1	O	>1		
130	RDM	Remittance Delivery Method	O	1	O	1		
140	DTM	Date/Time Reference	O	1	O	1		



Technical Requirements Applicable to Electronic Data Interchange

DETAIL/TABLE 2

Pos. No.	ASC X12 Seg. ID	CDN Name	FI	Loop	Reg.	Max.	Reg.	Max.	Name Repeat	Comments
010	ENT	Entity			0	1	0	1	>1	Loop ENT but if used, segments RMR in position 150 is
		is optional,								
020	NM1	Individual or Organization Name			0	1	0	1	>1	
030	N2	Additional Name Information			0	>1	0	>1		
040	N3	Address Information			0	>1	0	>1		
050	N4	Geographic Location			0	1	0	1		
060	REF	Reference Numbers			0	>1	0	>1		
		mandatory.								
070	PER	Administrative Communications Contract			0	>1	0	>1		
080	ADX	Adjustment			0	1	0	1	>1	
090	NTE	Note/Special Instruction			0	>1	0	>1		
100	PER	Administrative Communications Contract			0	>1	0	>1		
105	DTM	Date/Time Reference			0	1	0	1		
110	REF	Reference Numbers			0	1	0	1	>1	
120	DTM	Date/Time Reference			0	>1	0	>1		
130	IT1	Baseline Item Data (Invoice)			0	1	0	1	>1	
140	REF	Reference Numbers			0	1	0	1	>1	
141	DTM	Date/Time Reference			0	1	0	1		
142	SAC	Service, Promotion, Allowance, or Charge Information			0	1	0	1	>1	
143	TXI	Tax Information			0	>1	0	>1		
144	SLN	Subline Item Detail			0	1	0	1	>1	
145	REF	Reference Numbers			0	1	0	1	>1	
146	DTM	Date/Time Reference			0	>1	0	>1		
147	SAC	Service, Promotion, Allowance, or Charge Information			0	1	0	1	>1	
148	TXI	Tax Information			0	>1	0	>1		
150	RMR	Remittance Advice Accounts Receivable			0	1	0	1	>1	
		Open Item Reference								
160	NTE	Notes/Special Instruction			0	>1	0	>1		
170	REF	Reference Numbers			0	>1	0	>1		
180	DTM	Date/Time Reference			0	>1	0	>1		
190	ITI	Baseline Item Data (Invoice)			0	1	0	1	>1	
200	REF	Reference Numbers			0	1	0	1	>1	
201	DTM	Date/Time Reference			0	1	0	1		
202	SAC	Service, Promotion, Allowance, or Charge Information			0	1	0	1	>1	
203	TXI	Tax Information			0	>1	0	>1		
204	SLN	Subline Item Detail			0	1	0	1	>1	
205	REF	Reference Numbers			0	1	0	1	>1	
206	DTM	Date/Time Reference			0	>1	0	>1		



Technical Requirements Applicable to Electronic Data Interchange

**DETAIL/TABLE 2 (continued)**

Pos. No.	Seq. ID	Name	ASC X12		CDN BP Reg.	FI Max	Loop Name Repeat		
			Req.	Max.					
207	SAC	Service, Promotion, Allowance, or Charge Information	0	1	0	1	>1		
208	TXI	Tax Information	0	>1	0	>1			
210	ADX	Adjustment	0	1	0	1			>1
220	NTE	Note/Special Instruction	0	>1	0	>1			
230	PER	Administrative Communications Contract	0	>1	0	>1			
240	REF	Reference Numbers	0	1	0	1	>1		
250	DTM	Date/Time Reference	0	>1	0	>1			
260	IT1	Baseline Item Data (Invoice)	0	1	0	1	>1		
270	REF	Reference Numbers	0	1	0	1	>1		
271	DTM	Date/Time Reference	0	1	0	1			
272	SAC	Services, Promotion, Allowance or Charge Information	0	1	0	1	>1		
273	TXI	Tax Information	0	>1	0	>1			
274	SLN	Subline Item Detail	0	1	0	1	>1		
275	REF	Reference Numbers	0	1	0	1	>1		
276	DTM	Date/Time Reference	0	>1	0	>1			
277	SAC	Service, Promotion, Allowance or Charge Information	0	1	0	1	>1		
278	TXI	Tax Information	0	>1	0	>1			
280	TXP	Tax Payment	0	1	0	1			>1
285	TXI	Tax Information	0	>1	0	>1			
287	DED	Deductions	0	1	0	1			>1
290	LX	Assigned Number	0	1	0	1			>1
295	REF	Reference Numbers	0	>1	0	>1			
300	TRN	Trace	0	>1	0	>1			
305	NM1	Individual or Organizational Name	0	1	0	1			>1
310	REF	Reference Numbers	0	>1	0	>1			
315	G53	Maintenance Type	0	1	0	1			
320	AIN	Income	0	1	0	1	>1		
325	QTY	Quantity	0	>1	0	>1			
330	DTP	Date or Time Period	0	>1	0	>1			
335	PEN	Pension Information	0	1	0	1	>1		
340	AMT	Monetary Amount	0	>1	0	>1			
345	DTP	Date or time or Period	0	>1	0	>1			
350	INV	Investment Vehicle Selection	0	1	0	1	>1		
355	DTP	Date or Time or Period	0	>1	0	>1			
360	N9	Reference Identification	0	1	0	1			1
370	AMT	Monetary Amount	0	1	0	1	>1		
380	REF	Reference Number	0	>1	0	>1			
390	N1	Name	0	1	0	1	>1		
400	REF	Reference Identification	0	>1	0	>1			



Technical Requirements Applicable to Electronic Data Interchange

**DETAIL/TABL2 (continued)**

Pos. No.	Seq. ID	Name	ASC X12		CDN BP Reg.	FI Max	Loop Name Repeat		
			Req.	Max.					
410	EMS	Employment Pension	0	1	0	1	>1		
420	ATN	Attendance	0	>1	0	>1			
430	AIN	Income	0	>1	0	>1			
440	PYD	Payroll Deduction	0	1	0	1	>1		
450	RYL	Royalty Payment	0	1	0	1			>1
460	NM1	Individual or Organizational Name	0	1	0	1			>1
470	LOC	Location	0	1	0	1	>1		
480	PID	Product/Item Description	0	1	0	1	>1		
490	DTM	Date/Time Reference	0	1	0	1			
500	PCT	Percent Amounts	0	1	0	1	>1		
510	QTY	Quantity	0	1	0	1			
520	AMT	Monetary Amount	0	1	0	1	>1		
530	ADX	Adjustment	0	>1	0	>1			
540	ASM	Amount and Settlement Method	0	1	0	1	>1		
550	ADX	Adjustment	0	1	0	1			

**SUMMARY/TABLE 3**

Pos. No.	Seq. ID	Name	ASC X12 Req.	ASC X12 Max	CDN BP Req.	FI Max	Loop Name/Repeat	Comments
010	SE	Transaction Set Trailer	M	1	M	1		

**5.5.1 BPR - Beginning Segment for Payment Order/Remittance Advice**

**Level:** Header

**Loop:** \_\_\_\_\_

**Usage:** Mandatory

**Max Use:** 1

**Purpose:** To specify payment detail of the Transaction Set.

**Syntax Notes:** - If either BPR18 or BPR19 is present, then the other is required.  
- If BPR20 is present, then BPR21 is required.



Technical Requirements Applicable to Electronic Data Interchange

3.5.1 Data Element Summary (continued)

Ref. Des.	Data Element	Name	Attributes		
BPR01	305	<b>Transaction Handling Code</b>	<b>M</b>		<b>1/2</b>
		- Mandatory element.	M	ID	1/2
		- Must be one of the following codes: D - make payment only; C - payment accompanies remittance advice; or I - send information only.			
BPR02	782	<b>Monetary Amount</b>	<b>M</b>	<b>R2</b>	<b>1/18</b>
		- Mandatory element.	M	R	1/18
		- If whole dollar amount, no decimal required; if fractional amount, maximum of two decimal places.			
		- BPR02 is the amount that shall be credited to the Receiver's account at its financial institution. It must be greater than zero. (This does not apply to 'I-type' transactions, which may be positive, negative, or zero.)			
BPR03	478	<b>Credit/Debit Flag Code</b>	<b>M</b>		<b>1/1</b>
		- Mandatory element.	M	ID	1/1
		- Must be 'C' (credit).			
BPR04	591	<b>Payment Method Code</b>	<b>M</b>		<b>3/3</b>
		- Mandatory element.	M	ID	3/3
		- Must be 'X12'.			
BPR05	812	<b>Payment Format Code</b>	<b>O</b>		<b>1/10</b>
		- Optional element, which financial institutions shall disregard.	O	ID	1/10
BPR06	506	<b>(DFI) ID Number Qualifier</b>	<b>M</b>		<b>2/2</b>
		- Mandatory element.	X	ID	2/2
		- Must be '04', which means 'CPA Identifier'.			
BPR07	507	<b>(DFI) Identification Number</b>	<b>M</b>		<b>9/9</b>
		- Mandatory element.	X	AN	3/12
		- BPR07 contains two components. The first four digits identify the Payor's FI. The next five digits specify a branch number. These are established CPA codes, maintained in the Financial Institutions File (FIF).			
		- As the 820 travels between Direct and Indirect Participants, this element must not be changed. An audit trail of the 820's movement must be maintained in the 'RR' REF02 reference number.			
BPR08	569	<b>Account Number Qualifier</b>	<b>O</b>		<b>1/3</b>
		- Optional element, which financial institutions shall disregard.	O	ID	1/3
BPR09	508	<b>Account Number</b>	<b>M</b>		<b>1/12</b>
		- Mandatory element.	X	AN	1/35
		- BPR09 identifies the Originator's account by account number at its financial institution.			
BPR10	509	<b>Originating Company Identifier</b>	<b>O</b>		<b>10/10</b>
		- Optional element, which financial institutions shall disregard.	O	AN	10/10
BPR11	510	<b>Originating Company Supplemental Code</b>	<b>O</b>		<b>9/9</b>
		- Optional element, which financial institutions shall disregard.	O	AN	9/9
BPR12	506	<b>(DFI) ID Number Qualifier</b>	<b>M</b>		<b>2/2</b>
		- Mandatory element.	X	ID	2/2
		- Must be '04', which means 'CPA Identifier'.			



**Technical Requirements Applicable to Electronic Data Interchange**

**3.5.1**

**Data Element Summary (continued)**

Ref. Des.	Data Element	Name	Attributes	
BPR13	507	<b>(DFI) Identification Number</b>	<b>M</b> X AN	<b>9/9</b> 3/12
		- Mandatory element.		
		- BPR13 consists of two components. The first four digits identify the Payee's FI. The next five digits specify a branch number. These are established CPA codes, maintained in the FIF.		
		- The Originating Direct Participant must use the information contained in the FIF to determine the Direct Participant that handles EDI payments for the Payee's FI.		
		- Receiving Direct Participants may use the FIF to verify the BPR13 element.		
BPR14	569	<b>Account Number Qualifier</b>	<b>O</b> O ID	<b>1/3</b> 1/3
		- Optional element, which financial institutions shall disregard.		
BPR15	508	<b>Account Number</b>	<b>M</b> X AN	<b>1/12</b> 1/35
		- Mandatory element.		
		- BPR15 identifies the Receiver's account by account number at its financial institution.		
BPR16	373	<b>Date</b>	<b>M</b> O DT	<b>8/8</b> 8/8
		- Mandatory element expressed as CCYYMMDD.		
		- Date indicated by the Originator when the amount specified in BPR02 is to be credited to the Receiver's account (value date).		
BPR17	1048	<b>Business Function Code</b>	<b>O</b> O ID	<b>1/3</b> 1/3
		- Optional element, which financial institutions shall disregard.		
BPR18	506	<b>(DFI) ID Number Qualifier</b>	<b>X</b> X ID	<b>2/2</b> 2/2
		- Relational element.		
		- Reserved for use as a corporate return account number qualifier.		
BPR19	507	<b>(DFI) Identification Number</b>	<b>X</b> X AN	<b>3/12</b> 3/12
		- Relational element.		
		- Reserved for use as a corporate return account number.		
BPR20	569	<b>Account Number Qualifier</b>	<b>O</b> O ID	<b>1/3</b> 1/3
		- Optional element, which financial institutions shall disregard.		
		- Reserved for use as a corporate return account number qualifier.		
BPR21	508	<b>Account Number</b>	<b>X</b> X AN	<b>1/35</b> 1/35
		- Relational element.		
		- Reserved for use as a corporate return account number.		

**3.5.2 NTE - Note/Special Instruction**

**Level:** Header

**Loop:** \_\_\_\_\_

**Usage:** Optional

**Max Use:** >1

**Purpose:** To transmit information from the Originator to the Receiver in a free-form format, if necessary, for comment or special instruction.

This is an optional segment, which financial institutions shall disregard.



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**3.5.3 TRN - Trace**

**Level:** Header

**Loop:** \_\_\_\_\_

**Usage:** **Mandatory**

**Max Use:** 1

**Purpose:** To transmit identifying numbers between the Originator and the Receiver. The Originator must specify the TRN segment in the transaction set header.

**Data Element Summary**

Ref. Des.	Data Element	Name	Attributes
TRN01	481	<b>Trace Type Code</b>	<b>M</b> 1/2 M ID 1/2
		- Mandatory element.	
		- Must be '1', which means 'Current Transaction Trace Numbers' (i.e., indicates that this is the trace segment for this transaction).	
TRN02	127	<b>Reference Identification</b>	<b>M</b> 1/30 M AN 1/30
		- Mandatory element.	
		- TRN02 contains the Originator's reference number that identifies this transaction.	
TRN03	509	<b>Originating Company Identifier</b>	<b>O</b> 10/10 O AN 10/10
		- Optional element, which financial institutions shall disregard.	
TRN04	127	<b>Reference Identification</b>	<b>O</b> 1/30 O AN 1/30
		- Optional element, which financial institutions shall disregard.	

**3.5.4 CUR - Currency**

**Level:** Header

**Loop:** \_\_\_\_\_

**Usage:** **Optional**

**Max Use:** 1

**Purpose:** To specify the currency used in a transaction.

This Standard applies to EDI Payment Items in Canadian funds, which do not make use of this segment.





**Technical Requirements Applicable to Electronic Data Interchange**

**3.5.5 REF - Reference Numbers**

**Level:** Header

**Loop:** \_\_\_\_\_

**Usage:** **Mandatory**

**Max Use:** >1

**Purpose:** To transmit identifying numbers between FIs.

The Payor's FI shall add one REF segment in the heading area to assign a unique payment trace number. As the 820 passes to other Direct and/or Indirect Participants, each must add their CPA FIF number to the payment trace number.

The following specifications apply to the occurrence of the REF segment used to specify the payment trace number. The format of other REF segments must comply with the ASC X12 Draft Standards for Trial Use.

**Data Element Summary**

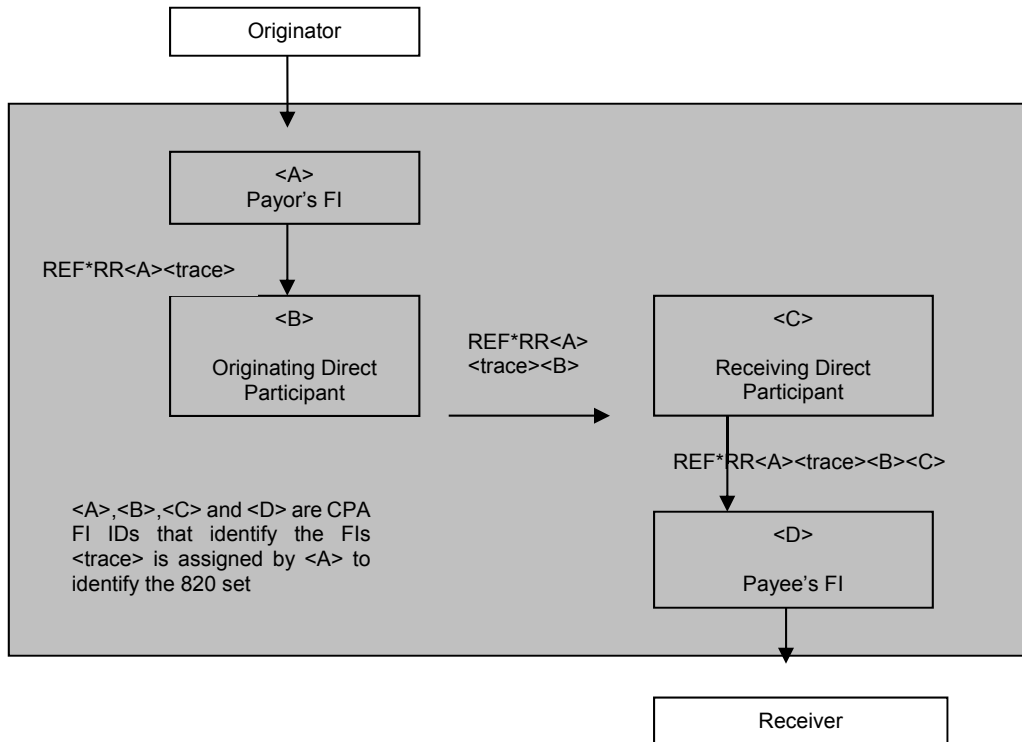
Ref. Des.	Data Element	Name	Attributes		
REF01 2/3	128	<b>Reference Identification Qualifier</b>	M	ID	2/3
		- Mandatory element.			
		- Must be 'RR' (Reserved for use by FIs only).			
REF02	127	<b>Reference Identification</b>	<b>M</b> X	AN	<b>22/30</b> 1/30
		- Mandatory element, that uniquely identifies the 820. This element may be referred to as the payment trace number.			
		- The recommended format consists of four components:			
		1) Four digit CPA financial institution ID that identifies the Payor's FI (see established CPA codes maintained in the FIF).			
		2) A unique combination of 18 digits, letters and/or spaces that identifies the 820.			
		3) Four digit CPA financial institution ID that is added by (and that identifies) the second FI which handles the 820. When the Payor's FI is an Indirect Participant, this component will identify the Originating Direct Participant. When the Payor's FI is the Originating Direct Participant, this component will identify the Receiving Direct Participant.			
		4) Four digit CPA financial institution ID that is added by (and that identifies) the third FI that handles the 820. When the Payor's FI is an Indirect Participant, this component will identify the Receiving Direct Participant. When the Payor's FI is the Originating Direct Participant and the payment is destined for an account at an Indirect Participant, this component will identify the Payee's FI.			
REF03	352	<b>Description</b>	<b>O</b> X	AN	<b>1/80</b> 1/80
		- Optional element, which financial institutions shall disregard.			
REF04	C040	<b>Reference Identifier</b>	<b>I</b> O		
		- Optional element, which financial institutions shall disregard.			



### Technical Requirements Applicable to Electronic Data Interchange

#### Illustration

The following diagram shows the 'RR' REF segment as the 820 is passed between Indirect and Direct Participants. In this example, both the Payor's and the Payee's FI are Indirect Participants.



#### 3.5.6 DTM - Date/Time Reference

**Level:** Header

**Loop:** \_\_\_\_\_

**Usage:** Optional

**Max Use:** >1

**Purpose:** To specify pertinent dates and times.

If used, Direct and Indirect Participants verify only the syntax of this segment because the value date is taken from BPR16, not the DTM segment.



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**3.5.7 N1 - Name**

**Level:** Header  
**Loop:** N1 **Repeat:** >1  
**Usage:** **Mandatory**  
**Max Use:** 1

**Purpose 1:** To identify the Originator.

**Purpose 2:** To identify the Receiver.

Two occurrences of the loop are mandatory between FIs to identify the Originator and the Receiver. The sequence in which they occur is discretionary.

**Syntax Note:** - If either N103 or N104 is present, then the other is required.

**Data Element Summary**

Ref. Des.	Data Element	Name	Attributes		
N101 2/3	98	<b>Entity Identifier Code</b>	M	ID	2/3
		- Mandatory element.			
		- At least two N1 loops must be used, one each with the following codes: PE - Payee; and PR - Payor.			
N102	93	<b>Name</b>	<b>M</b> X	AN	<b>1/60</b> 1/60
		- Mandatory element.			
		- PR loop must identify the Originator; PE loop must identify the Receiver.			
N103	66	<b>Identification Code Qualifier</b>	<b>X</b> X	ID	<b>1/2</b> 1/2
		- Relational element.			
N104	67	<b>Identification Code</b>	<b>X</b> X	AN	<b>2/80</b> 2/80
		- Relational element.			
N105	706	<b>Entity Relationship Code</b>	<b>O</b> O	ID	<b>2/2</b> 2/2
		- Optional element, which financial institutions shall disregard.			
N106 2/3	98	<b>Entity Identifier Code</b>	<b>O</b>	ID	2/3
		- Optional element, which financial institutions shall disregard.			

**3.5.8 Detail Area/Table Two (position 010 to position 355 inclusive)**

This table composes the remittance advice portion of the 820. Direct and Indirect Participants verify its syntax only.



**Technical Requirements Applicable to Electronic Data Interchange**

**3.6 824 - APPLICATION ADVICE**

EDI Payment Items not passing the ASC X12 syntax checking must be acknowledged with a negative 997 and shall not be passed on to application editing.

An 824 is used by Direct and Indirect Participants to indicate the results of ASC X12 application editing of EDI Payment Items in the Functional Group. Success or failure at the Functional Group level must be reported with a positive or negative 824, respectively. However, at the Transaction Set level, only rejected EDI Payment Items shall be reported with a negative 824. Accepted EDI Payment Items shall therefore not be reported at the 824 (OTI) Transaction Set level.

The 824 is used by Receiving Direct Participants to indicate liability transfer for the 820 EDI Payment Items received from Originating Direct Participants.

824s are packaged into Functional Groups with a functional identifier code (GS01) of 'AG'.

**HEADER/TABLE 1**

POS. No.	Seq. ID	Name	ASC Req.	X12 Max.	CDN Req.	FI Max	Loop Name/ Repeat	Comments
010	ST	Transaction Set Header	M	1	M	1		
020	BGN	Beginning Segment	M	1	M	1		
030	NM1	Individual or Organizational Name	O	1	O	1	>1	N1 loop optional but, if used, N1 segment mandatory
040	N2	Additional Name Info.	O	2	O	2		
050	N3	Address Information	O	2	O	2		
060	N4	Geographic Location	O	1	O	1		
070	REF	Reference Numbers	O	12	O	12		
080	PER	Administrative Communications Contract	O	3	O	3		

**DETAIL/TABLE 2**

POS. No.	Seq. ID	Name	ASC Req.	X12 Max.	CDN Req.	FI Max	Loop Name/ Repeat
010	OTI	Original Transaction Identification	M	1	M	1	>1
020	REF	Reference Numbers	O	12	O	12	
030	DTM	Date/Time Reference	O	2	O	2	
040	PER	Administrative Communications Contract	O	3	O	3	
050	AMT	Monetary Amount	O	10	M	10	
060	QTY	Quantity	O	10	M	10	
065	N1	Name	O	1	O	1	
070	TED	Technical Error Description	O	1	O	1	>1
080	NTE	Note/Special Instruction	O	100	O	100	
082	RED	Related Data	O	100	O	100	
085	LM	Code Source Information	O	1	O	1	>1
086	LQ	Industry Code	M	100	M	100	
087	RED	Related Data	O	100	O	100	
090	SE	Transaction Set Trailer	M	1	M	1	



**Technical Requirements Applicable to Electronic Data Interchange**

**3.6.1 BGN - Beginning Segment**

**Level:** Header

**Loop:** \_\_\_\_\_

**Usage:** **Mandatory**

**Max Use:** 1

**Purpose:** To indicate the beginning of a Transaction Set.

**Syntax Note:** If BGN05 is present, then BGN04 is required.

**Data Element Summary**

Ref. Des.	Data Element	Name	Attributes		
BGN01	353	<b>Transaction Set Purpose Code</b>	<b>M</b>		<b>2/2</b>
		- Mandatory element.	M	ID	2/2
		- Must be '11' (response).			
BGN02	127	<b>Reference Identification</b>	<b>M</b>		<b>5/30</b>
		- Mandatory element, that uniquely identifies the 824.	M	AN	1/30
		- Recommended format consists of two components:			
		1) Four digit CPA financial institution ID that identifies the Direct or Indirect Participant which originated the 824.			
		2) A unique combination of up to 26 digits, letters and/or spaces that identifies the 824.			
BGN03	373	<b>Date</b>	<b>M</b>		<b>8/8</b>
		- Mandatory element, that identifies the date when the 824 was created expressed as CCYYMMDD.	M	DT	8/8
BGN04	337	<b>Time</b>	<b>X</b>		<b>4/8</b>
		- Relational element, that identifies the time when the 824 was created.	X	TM	4/8
BGN05	623	<b>Time Code</b>	<b>O</b>		<b>2/2</b>
		- Optional element.	O	ID	2/2
BGN06	127	<b>Reference Identification</b>	<b>O</b>		<b>1/30</b>
		- Optional element, which financial institutions shall disregard.	O	AN	1/30
BGN07	640	<b>Transaction Type Code</b>	<b>O</b>		<b>2/2</b>
		- Optional element, which financial institutions shall disregard.	O	ID	2/2
BGN08	306	<b>Action Code</b>	<b>O</b>		<b>1/2</b>
		- Optional element, which financial institutions shall disregard.	O	ID	1/2
BGN09	786	<b>Security Level Code</b>	<b>O</b>		<b>2/2</b>
		- Optional element, which financial institutions shall disregard.	O	ID	2/2



### Technical Requirements Applicable to Electronic Data Interchange

#### 3.6.2 N1 Loop in the Header Area

The Direct or Indirect Participant receiving the 824 only verifies the syntax of this optional loop. Information about the N1 loop can be found in the ASC X12 standards documentation.

#### 3.6.3 OTI Loop in Detail Area of 824

This is a mandatory loop that must occur at least once. The first occurrence provides information about one Functional Group. Subsequent occurrences of the OTI loop may provide information about each Transaction Set within the Functional Group. All of this information relates to application editing.

To provide clear specifications, the segments and Data Elements for the Functional Group OTI loop are described first, followed by information about the transaction set OTI loop.

#### 3.6.4 Functional Group OTI Loop

POS. No.	Seq. ID	Name	ASC Req.	X12 Max.	CDN Req.	FI Max	Loop Name/Repeat	Comments
010	OTI	Original Transaction						
		Identification	M	1	M	1	OTI>1	<b>At the functional group level, only one OTI loop must be used</b>
020	REF	Reference Numbers	O	12	O	12		
030	DTM	Date/Time Reference	O	2	O	2		
040	PER	Admin Comm.						
		Contact	O	3	O	3		
050	AMT	Monetary Amount	O	10	M	10		
060	QTY	Quantity	O	10	M	10		
065	N1	Name	O	1	O	1		
070	TED	Technical Error Description	O	1	O	1	>1	
080	NTE	Note/Special Instruction	O	100	O	100		
085	LM	Code Source Information	O	1	O	1	>1	
086	LQ	Industry Code	M	100	M	100		

The Functional Group OTI loop provides a summary of the application editing performed:

- when no errors have been detected, the TED segment is not included in the loop;
- when an entire Functional Group is rejected due to a Functional Group error, the TED segment indicates the error; or
- when one or more Transaction Sets within the Functional Group have been rejected due to a Transaction Set error, the TED segment is not needed in the Functional Group OTI loop because the error shall be detailed in the transaction set OTI loop.



**Technical Requirements Applicable to Electronic Data Interchange**

**3.6.4.1 OTI - Original Transaction Identification (Functional Group Level)**

**Level:** Header

**Loop:** OT1 **Repeat:** 1

**Usage:** Mandatory

**Max Use:** 1

**Purpose:** To identify a Functional Group and indicate a summary of the results of application editing.

**Data Element Summary**

Ref. Des.	Data Element	Name	Attributes	
OTI01	110	<b>Application Acknowledgment Code</b>	<b>M</b>	<b>1/2</b>
		- Mandatory element.	M	ID 1/2
		- Of the X12 codes available, must be one of the following:		
		- <b>GA - Functional Group Accept</b>		
		All transaction sets within the functional group have been accepted.		
		- <b>GP - Functional Group Partial Accept/Reject</b>		
		One or more of the transaction sets within the functional group have been rejected due to a set level error, such as an invalid account number or a missing code.		
		- <b>GR - Functional Group Reject</b>		
		All transaction sets within the functional group have been rejected due to set level or functional group level errors.		
OTI02 2/3	128	<b>Reference Identification Qualifier</b>	<b>M</b>	<b>2/3</b>
		- Mandatory element.	M	ID 2/3
OTI03	127	<b>Reference Identification</b>	<b>M</b>	<b>1/30</b>
		- Mandatory element, intended to identify the functional group that has been edited.	M	AN 1/30
OTI04	142	<b>Application Sender's Code</b>	<b>M</b>	<b>2/15</b>
		- Mandatory element.	O	AN 2/15
		- Must contain the same value used in GS02 for the functional group that was edited.		
OTI05	124	<b>Application Receiver's Code</b>	<b>M</b>	<b>2/15</b>
		- Mandatory element.	O	AN 2/15
		- Must contain the same value used in GS03 for the functional group that was edited.		
OTI06	373	<b>Date</b>	<b>M</b>	<b>8/8</b>
		- Mandatory element expressed as CCYYMMDD.	O	DT 8/8
		- Must contain the same value used in GS04 for the functional group that was edited.		
OTI07	337	<b>Time</b>	<b>M</b>	<b>4/8</b>
		- Mandatory element.	O	TM 4/8
		- Must contain the same value used in GS05 for the functional group that was edited.		



**Technical Requirements Applicable to Electronic Data Interchange**

**3.6.4.1 Data Element Summary (continued)**

Ref. Des.	Data Element	Name	Attributes		
OT108 1/9	28	<b>Group Control Number</b>	<b>M</b>		
			X	NO	1/9
		- Mandatory element, intended to identify the functional group that has been edited.			
		- Must contain the same value used in GS06 for the functional group that was edited.			
OT109 4/9	329	<b>Transaction Set Control Number</b>	<b>O</b>		
			0	AN	4/9
		- Optional element.			
		- This element has no meaning on a group OTI and if used, shall be disregarded.			
OT110	143	<b>Transaction Set Identifier Code</b>	<b>O</b>		
			O	ID	3/3
		- Optional element.			
		- This element has no meaning on a group OTI and if used, shall be disregarded.			
OT111	480	<b>Version/Release/Industry Identifier Code</b>	<b>O</b>		
			O	AN	1/12
		- Optional element.			
		- If used, must contain the same value used in GS08 for the functional group that was edited.			
OT112	353	<b>Transaction Set Purpose Code</b>	<b>O</b>		
			O	ID	2/2
		- Optional Element, which financial institutions shall disregard.			
OT113	640	<b>Transaction Type Code</b>	<b>O</b>		
			O	ID	2/2
		- Optional Element, which financial institutions shall disregard.			
OT114	346	<b>Application Type</b>	<b>O</b>		
			O	ID	2/2
		- Optional Element, which financial institutions shall disregard.			
OT115	306	<b>Action Code</b>	<b>O</b>		
			O	ID	1/2
		- Optional Element, which financial institutions shall disregard.			
OT116	305	<b>Transaction Handling Code</b>	<b>O</b>		
			O	ID	1/2
		- Optional Element, which financial institutions shall disregard.			
OT117	641	<b>Status Reason Code</b>	<b>O</b>		
			O	ID	3/3
		- Optional Element, which financial institutions shall disregard.			

**3.6.4.2 AMT - Monetary Amount (Functional Group Level)**

**Level:** Header

**Loop:** \_\_\_\_\_

**Usage:** **Mandatory**

**Max Use:** 10

**Purpose:** To indicate the total monetary amount.





**Technical Requirements Applicable to Electronic Data Interchange**

**3.6.4.2 AMT - Monetary Amount (Functional Group Level) (continued)**

The Direct or Indirect Participant which has received that Functional Group may use up to three of the ten AMT segments, in any sequence, to indicate three different amount totals to the Direct or Indirect Participant which has originated the group. The amount totals are:

- a total of the BPR02 amounts of all received 820 transactions;
- a total of the BPR02 amounts from rejected 820s; and
- a total of the BPR02 amounts from accepted 820s.

The format of other AMT segments must comply with the ASC X12 Draft Standards for Trial Use.

**Data Element Summary**

Ref.	Data Element	Name	Attributes		
AMT01	522	<b>Amount Qualifier Code</b>	<b>M</b>		<b>1/3</b>
			M	ID	1/3
		- Mandatory element.			
		- Includes only those functional groups that have passed syntax checks and have been acknowledged by a positive 997.			
		- Must be one of the following codes to correspond to the descriptions above:			
		<b>2 - Batch Total or OP - Original Payment Total</b>			
		The amount (BPR02) taken from all 820s that are received.			
		- <b>BT - Bank Reject Total</b>			
		The amount (BPR02) taken from all 820s that are rejected due to either functional group or transaction set level errors.			
		- <b>NP - Net to Pay Total</b>			
		The amount (BPR02) taken from all 820s that are accepted.			
		- The number of AMT segments must correspond to the number of QTY segments.			
AMT02	782	<b>Monetary Amount</b>	<b>M</b>	<b>R2</b>	<b>1/18</b>
			M	R	1/18
		- Mandatory element.			
AMT03	478	<b>Credit/Debit Flag Code</b>	<b>O</b>		<b>1/1</b>
			O	ID	1/1
		- Optional element, which financial institutions shall disregard.			

Set Note:

	1 <sup>st</sup> AMT Segment		2 <sup>nd</sup> AMT Segment		3 <sup>rd</sup> AMT Segment	
	AMT01	AMT02	AMT01	AMT02	AMT01	AMT02
If All Transaction Sets Accepted	Must be NP M	Total BPR02	Must be BT O	Must be 0	Must be 2 or OP O	Total BPR02
If All Transaction Sets Rejected	Must be NP M	Must be 0	Must be BT M	Total BPR02	Must be 2 or OP O	Total BPR02
If Partial Accept/Reject	Must be NP M	Total accepted BPR02	Must be BT M	Total rejected BPR02	Must be 2 or OP O	Total BPR02



**Technical Requirements Applicable to Electronic Data Interchange**

**3.6.4.3 QTY - Quantity (Functional Group Level)**

**Level:** Header  
**Loop:** \_\_\_\_\_  
**Usage:** **Mandatory**  
**Max Use:** 10  
**Purpose:** To specify quantity information.

The Direct or Indirect Participant which has received that Functional Group may use up to three of the ten QTY segments, in any sequence, to indicate three different counts to the Direct or Indirect Participant which has originated the group. The counts are:

- the total number of 820s;
- a total number of rejected 820s; and
- a total number of accepted 820s.

**Data Element Summary**

Ref. Des.	Data Element	Name	Attributes
QTY01	673	<b>Quantity Qualifier</b>	<b>M</b> 2/2 M ID 2/2
		- Mandatory element.	
		- Includes only those functional groups that have passed syntax checks and have been acknowledged by a positive 997.	
		- Must be one of the following codes to correspond to the descriptions above:	
		- <b>46 - Total Transactions</b>	
		The number of 820s received within the functional group.	
		- <b>54 - Bank Reject Item Count</b>	
		A count of the 820s within the functional group that are rejected.	
		- <b>55 - Net to Pay Item Count</b>	
		A count of the 820s within the functional group that are accepted.	
		- The number of QTY segments must correspond to the number of AMT segments.	
QTY02	380	<b>Quantity</b>	<b>M</b> 1/15 M R 1/15
		- Mandatory element that represents the count of the 820 transaction sets.	
QTY03	C001	<b>Composite Unit of Measure</b>	<b>I</b> 2/2 O
		- Optional element, which financial institutions shall disregard.	



**Technical Requirements Applicable to Electronic Data Interchange**

**3.6.4.3 QTY - Quantity (Functional Group Level) (continued)**

**Set Note:**

	QTY Segment		QTY Segment		QTY Segment	
	QTY01	QTY02	QTY01	QTY02	QTY01	QTY02
If All Transaction Sets Accepted	Must be 55 <b>M</b>	Count of all transaction sets	Must be 54 <b>O</b>	Must be 0	Must be 46 <b>O</b>	Count of all transaction sets
If All Transaction Sets Rejected	Must be 55 <b>M</b>	Must be 0	Must be 54 <b>M</b>	Count of all transaction sets	Must be 46 <b>O</b>	Count of all transaction sets
If Partial Accept/Reject	Must be 55 <b>M</b>	Count of all accepted transaction sets	Must be 54 <b>M</b>	Count of all rejected transaction sets	Must be 46 <b>O</b>	Count of all transaction sets

**3.6.4.4 TED - Technical Error Description (Functional Group Level)**

**Level:** Header  
**Loop:** TED **Repeat:** >1  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To identify an application error.

**Data Element Summary**

Ref. Des.	Data Element	Name	Attributes
TED01 1/3	647	<b>Application Error Condition Code</b>	<b>M</b>
		- Mandatory element. - Of the X12 codes available, must be one of the following:  006 - duplicate; 007 - missing data; 008 - out of range; 009 - invalid date; 010 - out of balance; 011 - not matching; 012 - invalid combination; or ZZZ - mutually defined.	M ID 1/3
TED02	3	<b>Free Form Message</b>	<b>O</b> AN <b>1/60</b>
		- Optional element.	O 1/60
TED03	721	<b>Segment ID Code</b>	<b>O</b> ID <b>2/3</b>
		- Optional element.	O 2/3



**Technical Requirements Applicable to Electronic Data Interchange**

**3.6.4.4 Data Element Summary (continued)**

Ref. Des.	Data Element	Name	Attributes		
		- This element has limited meaning on a functional group TED segment. If used, it must be 'GS' or 'GE', to specify an error on the GS or GE segment.			
TED04	719	<b>Segment Position in Transaction Set</b>	<b>O</b>		<b>1/6</b>
		- Optional element.	O	NO	1/6
		- This element has no meaning on a functional group TED and if used, shall be disregarded.			
TED05	722	<b>Element Position in Segment</b>	<b>O</b>		<b>1/2</b>
		- Optional element.	O	NO	1/2
		- This element has limited meaning on a functional group TED segment. It may be used to specify an error in an element on the GS or GE segment.			
TED06 1/4	725	<b>Data Element Reference Number</b>	<b>O</b>		
		- Optional element.	O	NO	1/4
		- This element has limited meaning on a functional group TED segment. It may be used to specify an error in an element on the GS or GE segment.			
TED07	724	<b>Copy of Bad Data Element</b>	<b>O</b>		<b>1/99</b>
		- Optional element.	O	AN	1/99
		- This element has limited meaning on a functional group TED segment. It may be used to specify an error on the GS or GE segment.			
TED08	961	<b>Data Element New Content</b>	<b>O</b>		<b>1/99</b>
		- Optional element, which financial institutions shall disregard.	O	AN	1/99

**3.6.5 Transaction Set OTI Loop**

Set level OTI loops are mandatory when an error has been detected with a Transaction Set in the edited Functional Group. Accepted transactions shall not be identified with Transaction Set OTI groups.

POS. No.	Seq. ID	Name	ASC Req.	X12 Max.	CDN Req.	FI Max	Loop Name/ Repeat	Comments
010	OTI	Original Transaction Identification	M	1	<b>M</b>	<b>1</b>	>1	<b>QTI, AMT &amp; TED segments mandatory</b>
020	REF	Reference Numbers	O	12	<b>O</b>	<b>12</b>		
030	DTM	Date/Time Reference	O	2	<b>O</b>	<b>2</b>		
040	PER	Administrative Communications Contract	O	3	<b>O</b>	<b>3</b>		
050	AMT	Monetary Amount	O	10	<b>M</b>	<b>10</b>		
060	QTY	Quantity	O	10	<b>O</b>	<b>10</b>		
065	N1	Name	O	1	<b>O</b>	<b>1</b>		
070	TED	Technical Error Description	O	1	<b>O</b>	<b>1</b>	>1	
080	NTE	Note/Special Instruction	O	100	<b>O</b>	<b>100</b>		
085	LM	Code Source Information	O	1	<b>O</b>	<b>1</b>	>1	
086	LQ	Industry Code	M	100	<b>M</b>	<b>100</b>		

The TED segments identify each error in the Transaction Set.



**Technical Requirements Applicable to Electronic Data Interchange**

**3.6.5.1 OTI - Original Transaction Identification (Transaction Set Level)**

**Level:** Header

**Loop:** OTI                      **Repeat:** >1

**Usage:** **Optional**

**Max Use:** 1

**Purpose:** To identify a Transaction Set and indicate in detail the errors detected in application editing.

**Data Element Summary**

Ref. Des.	Data Element	Name	Attributes	
OTI01	110	<b>Application Acknowledgment Code</b>	<b>M</b>	<b>1/3</b>
		- Mandatory element. - Must be `TR` (transaction set reject).	M	ID 1/3
OTI02 2/3	128	<b>Reference Identification Qualifier</b>	<b>M</b>	<b>2/3</b>
		- Mandatory element. - Must be `RR`.	M	ID 2/3
OTI03	127	<b>Reference Identification</b>	<b>M</b>	<b>1/30</b>
		- Mandatory element, intended to identify the transaction set that has been edited. - Must contain the same number used to uniquely identify the 820 transaction set in the functional group that was edited. - Must be REF02 from the original 820 when REF01 is `RR`.	M	AN 1/30
OTI04	142	<b>Application Sender's Code</b>	<b>O</b>	<b>2/15</b>
		- Optional element, which financial institutions shall disregard.	O	AN 2/15
OTI05	124	<b>Application Receiver's Code</b>	<b>O</b>	<b>2/15</b>
		- Optional element, which financial institutions shall disregard.	O	AN 2/15
OTI06	373	<b>Date</b>	<b>O</b>	<b>8/8</b>
		- Optional element, which financial institutions shall disregard.	O	DT 8/8
OTI07	337	<b>Time</b>	<b>O</b>	<b>4/8</b>
		- Optional element, which financial institutions shall disregard.	O	TM 4/8
OTI08	28	<b>Group Control Number</b>	<b>M</b>	<b>1/9</b>
		- Mandatory element. - Must contain the same value used in GS06 for the transaction set that was edited.	X	NO 1/9
OTI09 4/9	329	<b>Transaction Set Control Number</b>	<b>M</b>	<b>4/9</b>
		- Mandatory element, intended to identify the transaction set that has been edited. - Must contain the same value used in ST02 for the transaction set that was edited.	O	AN 4/9
OTI10	143	<b>Transaction Set Identifier Code</b>	<b>M</b>	<b>3/3</b>
		- Mandatory element. - Must contain the same value used in ST01 for the transaction set that was edited.	O	ID 3/3



**Technical Requirements Applicable to Electronic Data Interchange**

**3.6.5.1 Data Element Summary (continued)**

Ref.	Data	Name	Attributes	
Des.	Element			
OTI11	480	Version/Release/Industry Identifier Code	O AN	1/12 1/12

- Optional element, which financial institutions shall disregard.

**3.6.5.2 AMT - Monetary Amount (Transaction Set Level)**

**Level:** Header

**Loop:** \_\_\_\_\_

**Usage:** **Mandatory**

**Max Use:** 10

**Purpose:** To indicate the total monetary amount of the Transaction Set in error.

The Direct or Indirect Participant which has received the Transaction Set shall use the AMT segment to indicate the monetary amount of the Transaction Set in error to the Direct or Indirect Participant that has originated that Transaction Set.

When an 820 is in error, BPR02 amount must be reported.

**Data Element Summary**

Ref.	Data	Name	Attributes	
Des.	Element			
AMT01	522	Amount Qualifier Code	M ID	1/3 1/3
		- Mandatory element. - Includes only those transaction sets that have passed syntax checks. - Must be either 'BT' (bank reject total) or 'OP' (original payment total).		
AMT02	782	Monetary Amount	M R2 M R	1/18 1/18
		- Mandatory element.		
AMT03	478	Credit/Debit Flag Code	O ID	1/1 1/1
		- Optional element, which financial institutions shall disregard.		

**3.6.5.3 QTY - Quantity (Transaction Set Level)**

This is an optional segment, which financial institutions shall disregard.



### Technical Requirements Applicable to Electronic Data Interchange

#### 3.6.5.4 TED - Technical Error Description (Transaction Set Level)

**Level:** Header

**Loop:** TED                      **Repeat:** >1

**Usage:** **Optional**

**Max Use:** 1

**Purpose:** To identify an application error.

**Syntax Notes:** - If TED01 specifies an error condition, then TED03-TED07 must be used to report the appropriate information required for identification of the payment(s) in error.  
- If TED05 is present, then TED06 is required.

#### Data Element Summary

Ref. Des.	Data Element	Name	Attributes		
TED01	647	<b>Application Error Condition Code</b>	<b>M</b>		<b>1/3</b>
		- Mandatory element. - Of the X12 codes available, must be one of the following:  006 - duplicate; 007 - missing data; 008 - out of range; 009 - invalid date; 010 - out of balance; 011 - not matching; 012 - invalid combination; 801 - missing or invalid transaction handling code; 803 - missing or invalid payment method code; 805 - missing depository financial institution (DFI) qualifier; 806 - missing or invalid bank transit routing (ABA) number; 807 - missing or invalid originating account number; 808 - missing or invalid receiving account number; 809 - missing effective entry date; 810 - effective payment date is past; 811 - payment received too far in advance; 812 - missing transaction reference or trace number; 813 - missing or invalid payee name and address; 817 - duplicate trace number; 834 - missing or invalid effective payment date; 847 - closed/non-existent account number; or ZZZ - mutually defined.	M	ID	1/3
TED02	3	<b>Free Form Message</b>	<b>O</b>		<b>1/60</b>
		- Optional element.	O	AN	1/60
TED03	721	<b>Segment ID Code</b>	<b>X</b>		<b>2/3</b>
		- Relational element. - If used, must be one of the following codes which indicate the segments from an 820 transaction set that has been edited and found to be in error: 'BPR', 'REF', 'TRN' or N1.	O	ID	2/3
TED04	719	<b>Segment Position in Transaction Set</b>	<b>X</b>		<b>1/6</b>
		- Relational element. - The position of the segment in error, counted from the start of the transaction set (ST is position 1).	O	NO	1/6



Technical Requirements Applicable to Electronic Data Interchange

3.6.5.4 Data Element Summary (continued)

Ref. Des.	Data Element	Name	Attributes		
TED05	722	Element Position in Segment	X		1/2
			O	NO	1/2
		- Relational element. - This element must be specified if the error is with a specific element on a specific segment.			
TED06 1/4	725	Data Element Reference Number		X	
			O	NO	1/4
		- Relational element.			
TED07	724	Copy of Bad Data Element	X		1/99
			O	AN	1/99
		- Relational element. - This element must be specified when the application error condition code (TED01) is for any reason other than "missing data".			
TED08	961	Data Element New Content	O		1/99
			O	AN	1/99
		- Optional element.			

3.6.5.5 LM Loop in Detail Area

This is an optional loop, which financial institutions shall disregard.

3.7 997 - FUNCTIONAL ACKNOWLEDGMENT

(Note: The 997 does not cover any semantic level processing (i.e. the meaning of a transaction). This level of analysis is handled by the 824 - Application Advice.)

A 997 is used by Direct and Indirect Participants to indicate the results of ASC X12 syntax checking of Transaction Sets and Functional Group enveloping. Success or failure at the Functional Group level is reported with a positive or negative 997 respectively. A 997 must be returned in response to any Transaction Set other than a 997 Transaction Set. However, at the Transaction Set level, only rejected transactions shall be reported with a negative 997. Accepted transactions shall therefore not be reported at the 997 (AK2) transaction set level.

997s are packaged into Functional Groups with a functional identifier code (GS01) of 'FA'.

TABLE 1

POS. No.	Seq. ID	Name	ASC Req.	X12 Max.	CDN Req.	FI Max	Loop Name/ Repeat	Comments
010	ST	Transaction Set Header	M	1	M	1		
020	AK1	Functional Group Response Header	M					
030	AK2	Transaction Set Response Header 0		1	0	1	AK2/999999	Loop AK2 is Optional, but if used, segments AK2 & AK5 are mandatory.
040	AK3	Data Segment Note	0	1	0	1	AK3/999999	
050	AK4	Data Element Note	0	99	0	99		
060	AK5	Transaction Set Response Trailer	M	1	M	1		
070	AK9	Functional Group Response Trailer	M	1	M	1		
080	SE	Transaction Set Trailer	M	1	M	1		





### Technical Requirements Applicable to Electronic Data Interchange

#### 3.7.1 AK1 - Functional Group Response Header

**Level:** Header

**Loop:** \_\_\_\_\_

**Usage:** **Mandatory**

**Max Use:** 1

**Purpose:** To start acknowledgment of a functional group.

##### Data Element Summary

Ref. Des.	Data Element	Name	Attributes		
AK101	479	<b>Functional Identifier Code</b>	<b>M</b>		<b>2/2</b>
			M	ID	2/2
		- Mandatory element. - Code identifying a group of related transaction sets. - Of the X12 codes available, must be one of the following: RA - for payment order/remittance advice (820); or AG - for application advice (824).			
AK102	28	<b>Group Control Number</b>	<b>M</b>		<b>1/9</b>
			M	NO	1/9
		- Mandatory element. - Taken from GS06 of the functional group being acknowledged.			

#### 3.7.2 AK2 - Transaction Set Response Header

**Level:** Header

**Loop:** AK2      **Repeat:** 999,999

**Usage:** **Optional**

**Max Use:** 1

**Purpose:** To start acknowledgment of a single rejected Transaction Set.

##### Data Element Summary

Ref. Des.	Data Element	Name	Attributes		
AK201	143	<b>Transaction Set Identifier Code</b>	<b>M</b>		<b>3/3</b>
			M	ID	3/3
		- Mandatory element. - Code of transaction set being acknowledged (e.g., 820 for payment order/ remittance advice).			
AK202 4/9	329	<b>Transaction Set Control Number</b>		<b>M</b>	
			M	AN	4/9
		- Mandatory element. - Taken from ST02 of the transaction set being acknowledged.			



### Technical Requirements Applicable to Electronic Data Interchange

#### 3.7.3 AK3 - Data Segment Note

**Level:** Header

**Loop:** AK3                      **Repeat:** 999,999

**Usage:** **Optional**

**Max Use:** 1

**Purpose:** To report errors in a Data Segment and to identify the location of the Data Segment.

#### Data Element Summary

Ref. Des.	Data Element	Name	Attributes	
AK301	721	<b>Segment ID Code</b>	<b>M</b> M	<b>2/3</b> ID 2/3
		- Mandatory element. - Code defining the ID of the data segment in error (e.g., BPR or N1).		
AK302	719	<b>Segment Position in Transaction Set</b>	<b>M</b> M	<b>1/6</b> NO 1/6
		- Mandatory element. - The position of the segment in error, counted from the start of the transaction set (ST is position 1).		
AK303	447	<b>Loop Identifier Code</b>	<b>O</b> O	<b>1/4</b> AN 1/6
		- Optional element. - Code identifying a loop in the transaction set.		
AK304	720	<b>Segment Syntax Error Code</b>	<b>O</b> O	<b>1/3</b> ID 1/3
		- Optional element. - Code indicating a syntax error in a segment. - If used, must be one of the following codes:  1 - unrecognized segment ID; 2 - unexpected segment; 3 - mandatory segment missing; 4 - loop occurs over maximum times; 5 - segment exceed maximum use; 6 - segment not in defined transaction set; 7 - segment not in proper sequence; or 8 - segment has data element errors.		



**Technical Requirements Applicable to Electronic Data Interchange**

**3.7.4 AK4 - Data Element Note**

**Level:** Header

**Loop:** \_\_\_\_\_

**Usage:** **Optional**

**Max Use:** 99

**Purpose:** To report errors in a Data Element and to identify the location of the Data Segment.

**Data Element Summary**

Ref. Des.	Data Element	Composite Data Element	Data Element ID	Name	Attributes
AK401	C030			<b>Position in Segment</b>	<b>M</b> <b>M</b>
		<u>C0301</u>	<u>722</u>	<b>Element Position in Segment</b>	<b>M</b> <b>1/2</b> <b>M</b> <b>NO</b> <b>1/2</b>
				- Mandatory element. - Indicates the relative position of the data element in error within a data segment. - Count starts with 1 for the data element immediately following the segment ID (0 for an error in the segment ID itself).	
		<u>C0302</u>	<u>1528</u>	<b>Component Data Element Position in Composite</b>	<b>O</b> <b>1/2</b> <b>O</b> <b>NO</b> <b>1/2</b>
				- Optional element, which financial institutions shall disregard.	
AK402	<u>725</u> <u>1/4</u>			<b>Data Element Reference Number</b>	<b>O</b> <b>O</b> <b>NO</b> <b>1/4</b>
				- Optional element. - The reference number used to locate the data element in the ASC X12 Data Element Dictionary.	
AK403	<u>723</u> <u>1/3</u>			<b>Data Element Syntax Error Code</b>	<b>M</b> <b>M</b> <b>ID</b> <b>1/3</b>
				- Mandatory element. - Code indicating a syntax error in the data element. - Must be one of the following codes: 1 - mandatory data element missing; 2 - conditional required data element missing; 3 - too many data elements; 4 - data element too short; 5 - data element too long; 6 - invalid character in data element; 7 - invalid code value; 8 - invalid date; 9 - invalid time; or 10 - exclusion condition violated.	
AK404	<u>724</u>			<b>Copy of Bad Data Element</b>	<b>O</b> <b>1/99</b> <b>O</b> <b>AN</b> <b>1/99</b>
				- Optional element. - A copy of the bad data element in error.	



### Technical Requirements Applicable to Electronic Data Interchange

#### 3.7.5 AK5 - Transaction Set Response Trailer

**Level:** Trailer

**Loop:** \_\_\_\_\_

**Usage:** **Optional (Mandatory if AK2 is used)**

**Max Use:** 1

**Purpose:** To indicate rejection and to report errors in a transaction set.

#### Data Element Summary

Ref.	Data	Name	Attributes		
Des.	Element				
AK501	717	<b>Transaction Set Acknowledgment Code</b>	<b>M</b>		<b>1/1</b>
			M	ID	1/1
		- Mandatory element. - Code indicating the syntax level acceptance or rejection of a transaction set. - Of the X12 codes available, must be one of the following: A - accepted; or R - rejected.			
AK502	AK506 718	<b>Transaction Set Syntax Error Code</b>	<b>O</b>		<b>1/3</b>
			O	ID	1/3
		- Optional element. - Code indicating a syntax level error found in a transaction set. - If used, of the X12 codes available, must be one of the following:  1 - transaction set not supported; 2 - transaction set trailer missing; 3 - transaction set control number in header and trailer do not match; 4 - number of included segments does not match actual count; 5 - one or more segments in error; 6 - missing or invalid transaction set identifier; or 7 - missing or invalid transaction set control number.			

#### 3.7.6 AK9 - Functional Group Response Trailer

**Level:** Trailer

**Loop:** \_\_\_\_\_

**Usage:** **Mandatory**

**Max Use:** 1

**Purpose:** To acknowledge acceptance or rejection of a functional group, and to report the number of included transaction sets from the original trailer, the received sets and the accepted sets in this functional group.



Technical Requirements Applicable to Electronic Data Interchange

3.7.6 Data Element Summary (continued)

Ref. Des.	Data Element	Name	Attributes		
AK901	715	<b>Functional Group Acknowledge Code</b>	<b>M</b>		<b>1/1</b>
			M	ID	1/1
		- Mandatory element. - Code indicating the syntax level acceptance or rejection of a functional group. - Of the X12 codes available, must be one of the following:  A - accepted; P - at least one transaction set was rejected; or R - rejected (all transaction sets within the functional group).			
AK902	97	<b>Number of Transaction Sets Included</b>	<b>M</b>		<b>1/6</b>
			M	NO	1/6
		- Mandatory element. - The total number of transaction sets included in the functional group being acknowledged (taken from GE01).			
AK903	123	<b>Number of Received Transaction Sets</b>	<b>M</b>		<b>1/6</b>
			M	NO	1/6
		- Mandatory element. - The total number of transaction sets received.			
AK904	2	<b>Number of Accepted Transaction Sets</b>	<b>M</b>		<b>1/6</b>
			M	NO	1/6
		- Mandatory element. - The number of accepted transaction sets in a functional group.			
AK9056AK909	716	<b>Functional Group Syntax Error Code</b>	<b>O</b>		<b>1/3</b>
			O	ID	1/3
		- Optional elements. - Code indicating a syntax level error in the functional group header and/or trailer. - If used, of the X12 codes available, must be one of the following:  1 - functional group not supported; 2 - functional group version not supported; 3 - functional group trailer missing; 4 - group control number in the functional group header and trailer do not agree; 5 - number of included transaction sets does not match actual count; or 6 - group control number violates syntax.			



**APPENDIX A - SPECIFICATIONS FOR EDI TRANSACTION SETS**  
*(based on ASC x12 Version Release 003010)*

**A-1 INTRODUCTION**

A high degree of standardization of messages and message flows is essential for effective communication between participants in EDI. This section provides specifications for the format and use of EDI Transaction Sets that may be Exchanged between Canadian Financial Institutions, based on ASC X12 Version Release 003010.

The following Transaction Sets are addressed in those specifications:

- Envelope Segments: ISA, IEA, GS and GE;
- Transaction Set Header and Trailer: ST and SE;
- 820 - Payment Order/Remittance Advice;
- 824 - Application Advice;
- 997 - Functional Acknowledgement; and

The formats of the Canadian enveloping segments, the 820, the 824, and the 997 Transaction Sets comply with the ASC X12 Draft Standards for Trial Use, Version Release 003010, published in December 1990 (ASC X12s/90-850).

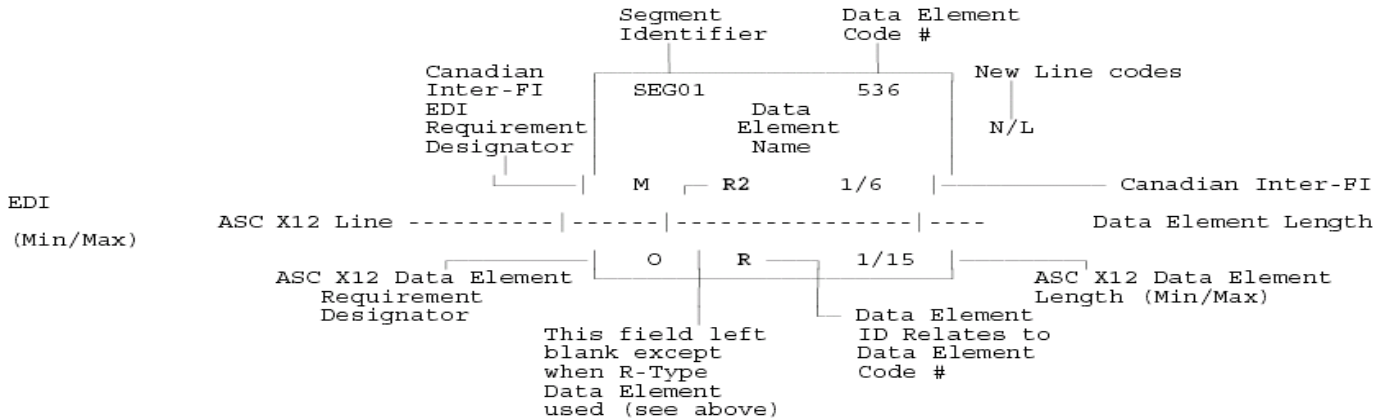
**A-2 NOTATION CONVENTION**

This section defines the specifications for EDI Transaction Sets resulting in Payment Items exchanged between Canadian Financial Institutions. The diagrams and tables used within this section explain the Data Element requirements are similar to those used in the relevant ASC X12 documentation. In the segment sequence table for each Transaction Sets, there are two pairs of columns that indicate ASC X12 and Canadian inter-financial institution EDI requirements.



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In the segment sequence tables, Canadian inter-financial institution EDI requirements for Data Element requirement designator and length will appear above the ASC X12 specified requirement designator and length. For inter-financial institution EDI in Canada, the maximum number of decimal places for R-type Data Elements is illustrated in the example below:



Throughout this section, asterisks (\*) have been used as Data Element separators (please refer to ASC X12 standards for others). This has been done to conform to ASC X12 notation conventions only and is not intended to represent any recommendation.

**A-3 BASIC EDI CONVENTIONS**

Direct and Indirect Participants are required to adhere to the following conventions in relation to all EDI structures, segments, Transaction Sets and elements:

- i) Data Element separators and minimum/maximum Data Element lengths must be used so that the required data can be recorded in the minimum amount of space in each Data Element. Trailing spaces should only be used to satisfy minimum length requirements. The exception to the foregoing is the ISA segment in which all Data Elements are mandatory and of fixed length.
- ii) Unless otherwise specified, all R-type Data Elements that represent amounts of money are assumed to have a maximum of two decimal places. Whole dollars can be represented as integers without any decimal places (example: 123). Fractions of dollars must be represented with a decimal point and up to two decimal places (examples: 123.56 or 78.5). To indicate a negative amount, a minus sign shall precede the high-order digit of the figure (example: -123). The specified maximum length of each R-type Data Element includes a plus or minus sign and a decimal point. All R-type Data Elements that represent a quantity or count are assumed to be integers (i.e., no decimal places).



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All N-type Data Elements that represent control numbers must be positive numbers.

- iii) All received transmissions must be validated against ASC X12 syntax rules and the specifications contained in these standards.

The results of syntax checking for all types of Transaction Sets (except 997s) must be reported back to the Direct or Indirect Participant via a Functional Acknowledgment (997).

- iv) Further inspection is performed on the integrity of the data and the results must be reported back to the Direct or Indirect Participant via an Application Advice (824).

This checking must verify:

- a) that the required combinations of codes and/or fields are present; and
- b) that contradictory combinations do not exist.

After data elements or segments have passed syntax checking, they must be passed unchanged to the next party.

**A-4 ENVELOPE SEGMENTS**

The following diagram shows the enveloping used for all EDI Transaction Sets.

SEG. ID	NAME	ASC REQ.	X12 MAX.	CDN-FI REQ.	CDN-FI MAX.	COMMENTS
ISA	Interchange Control Header	M	1	M	1	
GS	Functional Group Header	M	1	M	1	Multiple functional groups may be in each communication envelope.
ST	Transaction Set Header	M	1	M	1	
XXX	Segments for one set	M	1	M	1	
SE	Transaction Set Trailer	M	1	M	1	
GE	Functional Group Trailer	M	1	M	1	Multiple transaction sets may be in each Functional group.
IEA	Interchange Control Trailer	M	1	M	1	





**APPENDIX A - SPECIFICATIONS FOR EDI TRANSACTION SETS**  
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**A-4.1 ISA - Interchange Control Header**

**PURPOSE:** To start and identify an interchange of one or more functional groups and interchange-related control segments.

ISA*	ISA01 I01 Authorization Information Qualifier M ID 2/2 M ID 2/2	*	ISA02 I02 Authorization Information M AN 10/10 M AN 10/10	*	ISA03 I03 Security Information Qualifier M ID 2/2 M ID 2/2	*	ISA04 I04 Security Information M AN 10/10 M AN 10/10	*
	ISA05 I05 Interchange ID Qualifier M ID 2/2 M ID 2/2	*	ISA06 I06 Interchange Sender ID M ID 15/15 M ID 15/15	*	ISA07 I05 Interchange ID Qualifier M ID 2/2 M ID 2/2	*	ISA08 I07 Interchange Receiver ID M ID 15/15 M ID 15/15	*
	ISA09 I08 Interchange Date M DT 6/6 M DT 6/6	*	ISA10 I09 Interchange Time M TM 4/4 M TM 4/4	*	ISA11 I10 Interchange Standard ID M ID 1/1 M ID 1/1	*	ISA12 I11 Interchange Version ID M ID 5/5 M ID 5/5	*
	ISA13 I12 Interchange Control Number M NO 9/9 M NO 9/9	*	ISA14 I13 Acknowledgment Requested M ID 1/1 M ID 1/1	*	ISA15 I14 Test Indicator M ID 1/1 M ID 1/1	*	ISA16 I15 Sub-element Separator M AN 1/1 M AN 1/1	N / L

Contrary to elements in other segments, ISA Data Elements must be space-filled to their maximum length. If an element is not needed, the entire element must be space-filled. Therefore, every ISA data element is mandatory.

**ISA01 AUTHORIZATION INFORMATION QUALIFIER**

- Mandatory element.
- Valid values specified in bilateral agreements.
- Must equal `00' when ISA02 is not being used.

**ISA02 AUTHORIZATION INFORMATION**

- Mandatory element.
- Valid values specified in bilateral agreements.

**ISA03 SECURITY INFORMATION QUALIFIER**

- Mandatory element.
- Valid values specified in bilateral agreements.
- Must equal `00' when ISA04 is not being used.



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**ISA04 SECURITY INFORMATION**

- Mandatory element.
- Valid values specified in bilateral agreements.

**ISA05 INTERCHANGE ID QUALIFIER**

- Mandatory element.
- Valid values specified in bilateral agreements.
- Value may be communications network dependent.

**ISA06 INTERCHANGE SENDER ID**

- Mandatory element.
- Valid values specified in bilateral agreements.
- Value may be communications network dependent.

**ISA07 INTERCHANGE ID QUALIFIER**

- Mandatory element.
- Valid values specified in bilateral agreements.
- Value may be communications network dependent.

**ISA08 INTERCHANGE RECEIVER ID**

- Mandatory element.
- Valid values specified in bilateral agreements.
- Value may be communications network dependent.

**ISA09 INTERCHANGE DATE**

- Mandatory element.
- Date when the envelope was created, in the format of YYMMDD.

**ISA10 INTERCHANGE TIME**

- Mandatory element.
- Time when the envelope was created, in the format of HHMM.

**ISA11 INTERCHANGE CONTROL STANDARDS ID**

- Mandatory element.
- Must be 'U'.

**ISA12 INTERCHANGE CONTROL VERSION NUMBER**

- Mandatory element.
- Must be '00300'.



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**ISA13 INTERCHANGE CONTROL NUMBER**

- Mandatory element.
- Each envelope sent by a Direct or Indirect Participant must have a unique Interchange Control Number.

**ISA14 ACKNOWLEDGMENT REQUESTED**

- Mandatory element.
- Use of this field specified in bilateral agreements.

**ISA15 TEST INDICATOR**

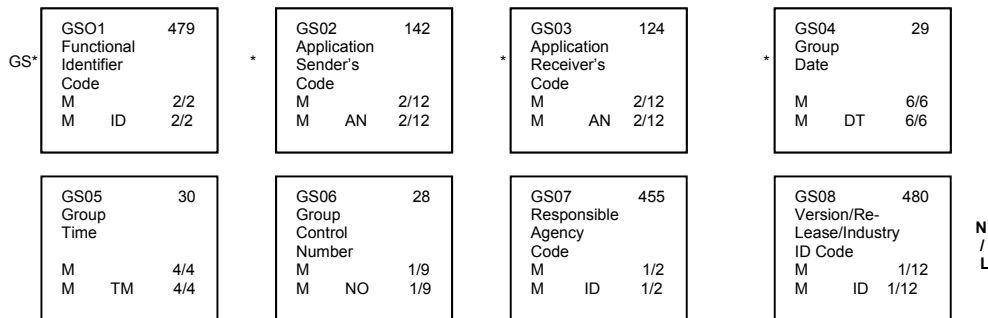
- Mandatory element.
- Must be 'P' (production). During testing, this element must be 'T' (test) and actual payments must not be made.

**ISA16 SUA-ELEMENT SEPARATOR**

- Mandatory element.
- Must have a different value than the element separator and the segment terminator to support future use of composite data elements.
- Currently, this field shall be disregarded during processing.

**A-4.2 GS - Functional Group Header**

**PURPOSE:** To indicate the beginning of a functional group and to provide control information.



**GS01 FUNCTIONAL IDENTIFIER CODE**

- Mandatory element.
- This element corresponds to one of the following values depending on the Transaction Sets within the Functional Group:  
     RA - 820s;  
     AG - 824s; or  
     FA - 997s.

**GS02 APPLICATION SENDER'S CODE**



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- Mandatory element.
- Content specified in bilateral agreements.

**GS03 APPLICATION RECEIVER'S CODE**

- Mandatory element.
- Content specified in bilateral agreements.

**GS04 GROUP DATE**

- Mandatory element.
- Date when the Functional Group was created, in the format YYMMDD.

**GS05 GROUP TIME**

- Mandatory element.
- Time when the Functional Group was created, in the format HHMM.

**GS06 GROUP CONTROL NUMBER**

- Mandatory element.
- Each Functional Group sent by a Direct or Indirect Participant must have a unique group control number by Financial Institution. It is preferred that this number be incremented by one. All transaction sets within a functional group with duplicate group control numbers shall be rejected.

**GS07 RESPONSIBLE AGENCY CODE**

- Mandatory element.
- Must be `X' (ASC X12).

**GS08 VERSION/RELEASE/INDUSTRY IDENTIFIER CODE**

- Mandatory element.
- Must be `003010'.

**A-4.3 ST - Transaction Set Header**

**PURPOSE:** To indicate the beginning of a Transaction Set and to provide control information. The Transaction Sets supported by these specifications are found in the introduction to this section.



**ST01 TRANSACTION SET IDENTIFIER CODE**

- Mandatory element.



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- Must specify one of the currently supported Transaction Sets.

**ST02 TRANSACTION SET CONTROL NUMBER**

- Mandatory element.
- Each Transaction Set within a Functional Group sent by a Direct or Indirect Participant must have a unique Transaction Set Control Number, assigned in ascending order. It is preferred that this number be incremented by one. Any Transaction Set within a Functional Group with the same Transaction Set control number as another transaction set in the same functional group shall be considered a duplicate and shall be rejected.

**A-4.4 SE - Transaction Set Trailer**

**PURPOSE:** To indicate the end of a Transaction Set and to provide a count of the transmitted segments.

SE*	SE01	96	*	SE02	329	N / L
	Number of			Transaction		
	Included			Set		
	Segments			Control Nbr		
	M	1/6		M	4/9	
M	NO 1/6	M AN	4/9			

**SE01 NUMBER OF INCLUDED SEGMENTS**

- Mandatory element.
- Must be the sum of the number of segments within the transaction set.
- If this element contains an incorrect number, the transaction set shall be rejected.

**SE02 TRANSACTION SET CONTROL NUMBER**

- Mandatory element.
- Must contain the same value found in the corresponding ST02.

**A-4.5 GE - Functional Group Trailer**

**PURPOSE:** To define the end of a Functional Group and to provide control information.

GE*	GE01	97	*	GE02	28	N / L
	Number of			Group		
	Included			Control		
	Sets			Number		
	M	1/6		M	1/9	
M	NO 1/6	M NO	1/9			



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**GE01 NUMBER OF TRANSACTION SETS INCLUDED**

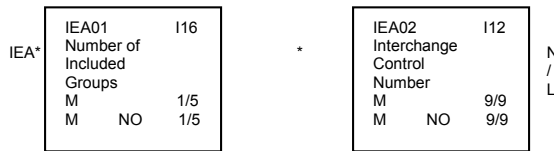
- Mandatory element.
- Must be the sum of the number of Transaction Sets within the Functional Group.
- If this element contains an incorrect number, the Functional Group (all transaction sets within the Functional Group) shall be rejected.

**GE02 GROUP CONTROL NUMBER**

- Mandatory element.
- Must contain the same value found in the corresponding GS06.

**A-4.6 IEA - Interchange Control Trailer**

**PURPOSE:** To define the end of an interchange of one or more functional groups and interchange-related control segments.



**IEA01 NUMBER OF INCLUDED FUNCTIONAL GROUPS**

- Mandatory element.
- Must be the sum of the number of Functional Groups within the envelope.
- If this element contains an incorrect number, the functional groups within the envelope shall be rejected.

**IEA02 INTERCHANGE CONTROL NUMBER**

- Mandatory element.
- Must contain the same value found in the corresponding ISA13.

**A-5 820 - PAYMENT ORDER/REMITTANCE ADVICE**

An 820 - Payment Order/Remittance Advice is sent by one Financial Institution to another Financial Institution to direct that FI to make a payment to a specified party.

The Financial Institution receiving the 820 shall verify syntax and payment-related information for each 820. If an 820 does not comply with these specifications, the 820 shall be rejected and reported back to the FI originating the 820 Transaction Set by a negative 997, negative 824, or both.

820s are packaged into Functional Groups with a functional identifier code (GS01) of 'RA'. The maximum number of 820s in the functional group must not exceed 999,999.



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SEG. ID	NAME	ASC REQ.	X12 MAX.	CDN REQ.	FI MAX.	LOOP NAME/REPEAT	COMMENTS
ST	Transaction Set Header	M	1	M	1		
BPS	Beginning Segment	M	1	M	1		
NTE	Note	F	100	F	100		
CUR	Currency	O	1	O	1		
REF	Reference Numbers	M	5	M	5		
DTM	Date/Time Reference	M	10	M	10		
N1	Name	O	1	M	1	N1/200	Two N1 loops are mandatory
N2	Additional Name Info	O	2	O	2		
N3	Address Information	O	2	O	2		
N4	Geographic Location	O	1	O	1		
REF	Reference Numbers	O	12	O	12		
PER	Admin Comm. Contact	O	3	O	3		
LS	Loop Header	M	1	M	1		
N1	Name	M	1	M	1	N1/10000	
RMT	Remittance Advice	M	1	M	1	RMT>1	
CUR	Currency	O	1	O	1		
REF	Reference Numbers	O	15	O	15		
DTM	Date/Time Reference	O	10	O	10		
LE	Loop Trailer	M	1	M	1		
SE	Transaction Set Trailer	M	1	M	1		

**A-5 BPS – Beginning Segment For 820**

**PURPOSE:** To specify payment detail of the set.

BPS*	BPS01 591 Payment Method Code M ID 3/3 M ID 3/3	*	BPS02 782 Monetary Amount M R2 1/15 M R 1/15	*	BPS03 305 Transaction Handling Code M 1/1 M ID 1/1	*	BPS04 506 (DFI) ID Number Qualifier M Code 2/2 O ID 2/2	*
	BPS05 507 (DFI) ID Number M AN 9/9 O AN 3/12	*	BPS06 508 Originating Account Number M AN 1/12 O AN 1/35	*	BPS07 509 Originating Company ID Number O 10/10 O AN 10/10	*	BPS08 510 Originating Company Supplemental O Code 9/9 O AN 9/9	*
	BPS09 506 (DFI) ID Number Qualifier M ID 2/2 O ID 2/2	*	BPS10 507 (DFI) ID Number M AN 9/9 O AN 3/12	*	BPS11 508 Receiving Account Number M AN 1/12 O AN 1/35	*	BPS12 513 Effective Entry Date M DT 6/6 O DT 6/6	*
	BPS13 727 Settlement Date O 6/6 C DT 6/6	N / L						



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**BPS01 PAYMENT METHOD CODE**

- Mandatory element.
- Must be `ZZZ', which means `credit'.

**BPS02 MONETARY AMOUNT**

- Mandatory element.
- Maximum of two decimal places.
- When BPS03 is `X' or `D', BPS02 is the amount that shall be credited to the Receiver's account at its Financial Institution. It must be greater than zero.

**BPS03 TRANSACTION HANDLING CODE**

- Mandatory element.
- Must be one of the following codes:

D - pay only; or  
X - pay and advise.

**BPS04 DFI ID NUMBER QUALIFIER**

- Mandatory element.
- Must be `04', which means `CPA Identifier'.

**BPS05 DFI ID NUMBER**

- Mandatory element.
- BPS05 contains two components. The first four digits identify the Payor's FI. The next five digits specify a Branch Number. These are established CPA codes, maintained in the Financial Institutions File (FIF).
- As the 820 travels between Direct and Indirect Participants, this element must not be changed. An audit trail of the 820's movement must be maintained in the `RR' REF02 reference number.

**BPS06 ORIGINATING ACCOUNT NUMBER**

- Mandatory element.
- BPS06 identifies the Originator's account by account number at its Financial Institution.

**BPS07 ORIGINATING COMPANY ID NUMBER**

- Optional element, which Financial Institutions shall disregard.

**BPS08 ORIGINATING COMPANY SUPPLEMENTAL CODE**

- Optional element, which Financial Institutions shall disregard.





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**BPS09 DFI ID NUMBER QUALIFIER**

- Mandatory element.
- Must be `04', which means `CPA Identifier'.

**BPS10 DFI ID NUMBER**

- Mandatory element.
- BPS10 consists of two components. The first four digits identify the Payee's FI. The next five digits specify a Branch Number. These are established CPA codes, maintained in the FIF.
- The Originating Direct Participant must use the information contained in the FIF to determine the Direct Participant that handles EDI payments for the Payee's FI.
- Receiving Direct Participants may use the FIF to verify the BPS10 element.

**BPS11 RECEIVING ACCOUNT NUMBER**

- Mandatory element.
- BPS11 identifies the Receiver's account by account number at its Financial Institution.

**BPS12 EFFECTIVE ENTRY DATE**

- Mandatory element.
- When BPS03 is `X' or `D', BPS12 indicates the date when the amount specified in BPS02 is to be credited to the Receiver's account (value date).

**BPS13 SETTLEMENT DATE**

- Optional element, which Financial Institutions shall disregard.

**A-3.2 NTE - Note/Special Instruction**

**PURPOSE:** To transmit information from the Originator to the Receiver in free format, if necessary, for comment or special instruction. This is an optional segment, which Financial Institutions shall disregard.

**A-3.3 CUR - Currency**

**PURPOSE:** To specify the currency used in a transaction.

This Standard applies to EDI Payment Items in Canadian funds, which do not make use of this segment.

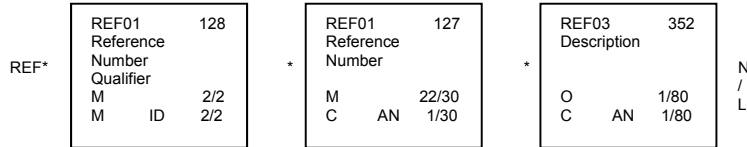


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**A-3.4 REF - Reference Numbers**

(Note: Two occurrences of REF segments are mandatory between FIs. The sequence in which they occur is discretionary.)

**PURPOSE 1:** To transmit identifying numbers between the Originator and the Receiver.



The Originator must specify at least one REF segment in the transaction set header up to a maximum of four.

**REF01 REFERENCE NUMBER QUALIFIER**

- Mandatory element.
- Must not be `RR`.

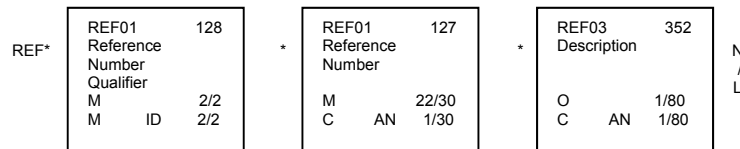
**REF02 REFERENCE NUMBER**

- Mandatory element.

**REF03 DESCRIPTION**

- Optional element.

**PURPOSE 2:** To transmit identifying numbers between FIs.



The Payor's FI shall add one REF segment in the heading area to assign a unique payment trace number. As the 820 passes to other Direct and/or Indirect Participants, each must add their CPA FIF number to the payment trace number.

The following specifications apply to the occurrence of the REF segment used to specify the payment trace number. The format of other REF segments must comply with ASC X12 Draft Standards Version Release 003010.



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**REF01** REFERENCE NUMBER QUALIFIER

- Mandatory element.
- Must be `RR' (Reserved for use by FIs only).

**REF02** REFERENCE NUMBER

- Mandatory element, that uniquely identifies the 820. This element may be referred to as the payment trace number.
- The recommended format consists of four components:
  - 1) Four digit CPA financial institution ID that identifies the Payor's FI (see established CPA codes maintained in the FIF).
  - 2) A unique combination of 18 digits, letters and/or spaces that identifies the 820.
  - 3) Four digit CPA financial institution ID that is added by (and that identifies) the second FI which handles the 820. When the Payor's FI is an Indirect Participant, this component will identify the Originating Direct Participant. When the Payor's FI is the Originating Direct Participant, this component will identify the Receiving Direct Participant.
  - 4) Four digit CPA financial institution ID that is added by (and that identifies) the third FI that handles the 820. When the Payor's FI is an Indirect Participant, this component will identify the Receiving Direct Participant. When the Payor's FI is the Originating Direct Participant and the payment is destined for an account at an Indirect Participant, this component will identify the Payee's FI.

**REF03** DESCRIPTION

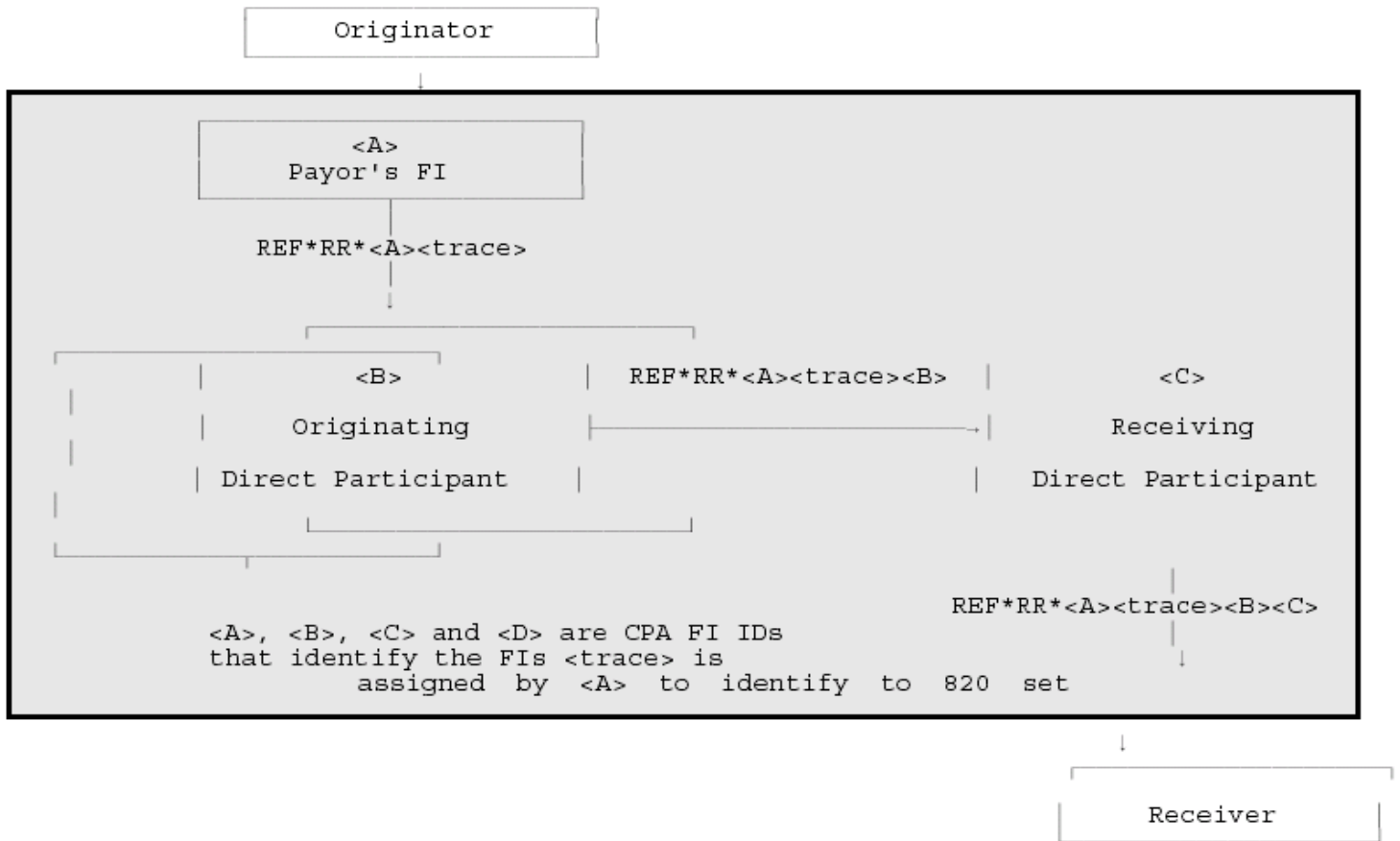
- Optional element, which financial institutions shall disregard.



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**Illustration**

The following diagram shows the 'RR' REF segment as the 820 is passed between Indirect and Direct Participants. In this example, both the Payor's and the Payee's FI are Indirect Participants.



**A-3.5 DTM - Date/Time Reference**

**PURPOSE:** To specify pertinent dates and times.

This is a mandatory segment. Direct and Indirect Participants verify only the syntax of this segment because the value date is taken from BPS12, not the DTM segment. Further information about the DTM segment can be found in the ASC X12 standards documentation.

**A-3.6 N1 Loop in Header Area**

*(Note: Two occurrences are mandatory between FIs to identify the Originator and the Receiver by name and code. The sequence in which they occur is discretionary.)*

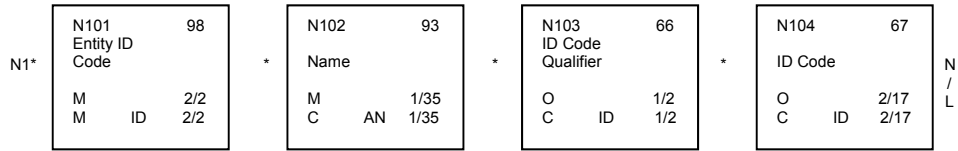


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**PURPOSE 1:** To identify the Originator.



**N101 ENTITY ID CODE**

- Mandatory element.
- Must be `PR`.

**N102 NAME**

- Mandatory element.
- Must identify Originator.

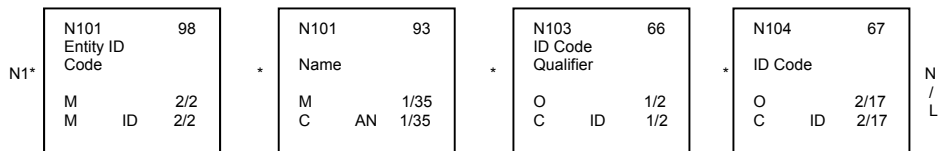
**N103 ID CODE QUALIFIER**

- Optional element.

**N104 ID CODE**

- Optional element.

**PURPOSE 2:** To identify the Receiver.



**N101 ENTITY ID CODE**

- Mandatory element.
- Must be `PE`.

**N102 NAME**

- Mandatory element.
- Must identify Receiver.

**N103 ID CODE QUALIFIER**

- Optional element.



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**N104 ID CODE**

- Optional element.

**A-3.7 Loop in Detail Area (LS to LE inclusive)**

This loop composes the remittance advice portion of the 820. Direct and Indirect Participants verify its syntax only.

**A-6 824 - APPLICATION ADVICE**

EDI Payment Items not passing the ASC X12 syntax checking must be acknowledged with a negative 997 and shall not be passed on to application editing.

An 824 is used by Direct and Indirect Participants to indicate the results of ASC X12 application editing of EDI Payment Items in the Functional Group. Success or failure at the functional group level must be reported with a positive or negative 824, respectively. However, at the Transaction Set level, only rejected EDI Payment Items shall be reported with a negative 824. Accepted EDI Payment Items shall therefore not be reported at the 824 (OTI) Transaction Set level.

The 824 is used by Receiving Direct Participants to indicate liability transfer for the 820 EDI Payment Items received from Originating Direct Participants. 824s are packaged into Functional Groups with a functional identifier code (GS01) of 'AG'.

SEG. ID	NAME	ASC REQ.	X12 MAX.	CDN REQ.	FI MAX.	LOOP NAME/REPEAT	COMMENTS
ST	Transaction Set Header	M	1	M	1		
BGN	Beginning Segment	M	1	M	1		
N1	Name	O	1	O	1	N1/2	N1 loop optional but, if used, N1 segment mandatory
N2	Additional Name Info	O	2	O	2		
N3	Address Information	O	2	O	2		
N4	Geographic Location	O	1	O	1		
REF	Reference Numbers	O	12	O	12		
PER	Admin Comm. Contact	O	3	O	3		
OTI	Original Transaction Identification	M	1	M	1	OTI/10000	
REF	Reference Numbers	O	12	O	12		
DTM	Date/Time Reference	O	2	O	2		
PER	Admin Comm. Contact	O	3	O	3		
AMT	Monetary Amount	O	10	M	10		
QTY	Quantity	O	10	M	10		
TED	Technical Error Description	O	1	O	1	TED/10000	
NTE	Note/Special Instruction	O	100	O	100		
SE	Transaction Set Trailer	M	1	M	1		



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**A-6.1 BGN - Beginning Segment**

**PURPOSE:** To indicate the beginning of a Transaction Set.

623	BGN01	353	BGN02	127	BGN03	373	BGN04	337	BGN05	
N	Transaction		Reference				Time			
/	BGN*	Set Purpose	*	Number	*	Date	*	Time	*	Code
L	Code									
2/2	M	2/2	M	5/30	M	6/6	C	4/4	O	
ID 2/2	M	ID 2/2	M	AN 1/30	M	DT 6/6	C	TM 4/4	O	

**BGN01 TRANSACTION SET PURPOSE CODE**

- Mandatory element.
- Must be `11' (response).

**BGN02 REFERENCE NUMBER**

- Mandatory element, that uniquely identifies the 824.
- Recommended format consists of two components:

- 1) Four digit CPA financial institution ID that identifies the Direct or Indirect Participant which originated the 824.
- 2) A unique combination of up to 26 digits, letters and/or spaces that identifies the 824.

**BGN03 DATE**

- Mandatory element, that identifies the date when the 824 was created.

**BGN04 TIME**

- Conditional element, that identifies the time when the 824 was created.

**BGN05 TIME CODE**

- Optional element.

**A-6.2 N1 Loop in the Header Area**

The Direct or Indirect Participant receiving the 824 only verifies the syntax of this optional loop. Information about the N1 loop can be found in the ASC X12 standards documentation.



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**A-6.3 OTI Loop in Detail Area of 824**

This is a mandatory loop that must occur at least once. The first occurrence provides information about one Functional Group. Subsequent occurrences of the OTI loop may provide information about each Transaction Set within the Functional Group. All of this information relates to application editing.

To provide clear specifications, the segments and Data Elements for the Functional Group OTI loop are described first, followed by information about the transaction set OTI loop.

**A-6.4 Functional Group OTI Loop**

SEG. ID	NAME	ASC REQ.	X12 MAX.	CDN REQ.	FI MAX.	LOOP NAME/REPEAT	COMMENTS
OTI	Original Transaction Identification	M	1	M	1	OTI/1	At the functional group level, only one OTI loop must be used
REF	Reference Numbers	O	12	O	12		
DTM	Date/Time Reference	O	2	O	2		
PER	Administrative Communications Contract	O	3	O	3		
AMT	Monetary Amount	O	10	M	10		
QTY	Quantity	O	10	M	10		
TED	Technical Error Description	O	1	O	1	TED/10000	
NTE	Note/Special Instruction	O	100	O	100		

The Functional Group OTI loop provides a summary of the application editing performed:

- when no errors have been detected, the TED segment is not included in the loop;
- when an entire Functional Group is rejected due to a Functional Group error, the TED segment indicates the error; or
- when one or more Transaction Sets within the Functional Group have been rejected due to a Transaction Set error, the TED segment is not needed in the functional group OTI loop because the error shall be detailed in the Transaction Set OTI loop.

**NTE NOTE/SPECIAL INSTRUCTION**

- Optional segment, which financial institutions shall disregard.







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**OTI03** REFERENCE NUMBER

- Mandatory element, intended to identify the functional group that has been edited.

**OTI04** APPLICATION SENDER'S CODE

- Mandatory element.
- Must contain the same value used in GS02 for the functional group that was edited.

**OTI05** APPLICATION RECEIVER'S CODE

- Mandatory element.
- Must contain the same value used in GS03 for the functional group that was edited.

**OTI06** GROUP DATE

- Mandatory element.
- Must contain the same value used in GS04 for the functional group that was edited.

**OTI07** GROUP TIME

- Mandatory element.
- Must contain the same value used in GS05 for the functional group that was edited.

**OTI08** GROUP CONTROL NUMBER

- Mandatory element, intended to identify the functional group that has been edited.
- Must contain the same value used in GS06 for the functional group that was edited.

**OTI09** TRANSACTION SET CONTROL NUMBER

- Optional element.
- This element has no meaning on a group OTI and if used, shall be disregarded.

**OTI10** TRANSACTION SET IDENTIFIER

- Optional element.
- This element has no meaning on a group OTI and if used, shall be disregarded.



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**OTI11 VERSION/RELEASE ID**

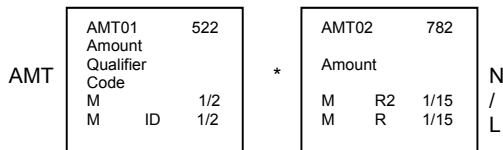
- Optional element.
- Must contain the same value used in GS08 for the Functional Group that was edited.

**A-6.4.2 AMT - Monetary Amount (Functional Group Level)**

**PURPOSE:** To indicate the total monetary amount.

The Direct or Indirect Participant which has received that Functional group may use up to three AMT segments, in any sequence, to indicate three different figures to the Direct or Indirect Participant which has originated the group. The figures are:

- a total of the BPS02 amounts of all received 820 transactions;
- a total of the BPS02 amounts from rejected 820s; and
- a total of the BPS02 amounts from accepted 820s.



The following specifications apply to the three occurrences of the AMT segment described above. The format of other AMT segments must comply with ASC X12 Draft Standards Version Release 003010.

**AMT01 AMOUNT QUALIFIER CODE**

- Mandatory element.
- Includes only those functional groups that have passed syntax checks and have been acknowledged by a positive 997.
- Must be one of the following codes to correspond to the descriptions above:

**- 2 - Batch Total**

The amount (BPS02) taken from all 820s that are received.

**- BT - Bank Reject Total**

The amount (BPS02) taken from all 820s that are rejected due to either Functional group or transaction set level errors.

**- NP - Net to Pay Total**

The amount (BPS02) taken from all 820s that are accepted.

- The number of AMT segments must correspond to the number of QTY segments.



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**AMT02 AMOUNT**

- Mandatory element.

When all the Transaction Sets within the Functional Group are accepted, one AMT segment is mandatory with an AMT01 of `NP' and an AMT02. If an AMT segment is present with an AMT01 of `2', AMT02 shall have the same value as the first AMT02. If an AMT segment is present with an AMT01 of `BT', AMT02 shall be zero.

When all the Transaction Sets within the functional group are rejected, two AMT segments are mandatory as follows:

- on one segment, AMT01 must be `NP' and AMT02 must be zero; and
- on another segment, AMT01 must be `BT' and AMT02 must be the total of BPS02 from all the 820 sets.

If an AMT segment is present with an AMT01 of `2', AMT02 shall have the same value as the AMT02 associated with AMT01=BT.

When some of the Transaction Sets are accepted and some sets are rejected, two AMT segments are mandatory as follows:

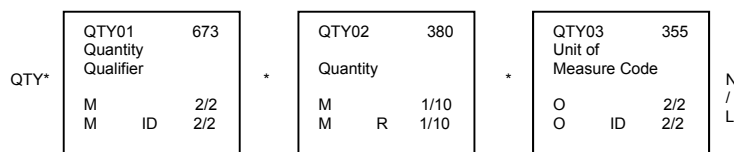
- on one segment, AMT01 must be `NP' and on another segment, AMT01 must be `BT'; and
- if an AMT segment is present with an AMT01 of `2', AMT02 must be the sum of the two AMT02s from the first two AMT segments.

**A-6.4.3 QTY - Quantity (Functional Group Level)**

**PURPOSE:** To specify quantity information.

The Direct or Indirect Participant which has received that Functional Group may use up to three QTY segments, in any sequence, to indicate three different figures to the Direct or Indirect Participant which has originated the group. The figures are:

- the total number of 820s;
- a total number of rejected 820s; and
- a total number of accepted 820s.



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**QTY01 QUANTITY QUALIFIER**

- Mandatory element.
- Includes only those Functional Groups that have passed syntax checks and have been acknowledged by a positive 997.
- Must be one of the following codes to correspond to the descriptions above:

**- 46 - Total Transactions**

The count (QTY02) of 820s within the functional group where QTY01 is '46'.

**- 54 - Bank Reject Item Count**

A count of the 820s within the Functional Group that are rejected.

**- 55 - Net to Pay Item Count**

A count of the 820s within the Functional Group that are accepted.

- The number of QTY segments must correspond to the number of AMT segments.

**QTY02 QUANTITY**

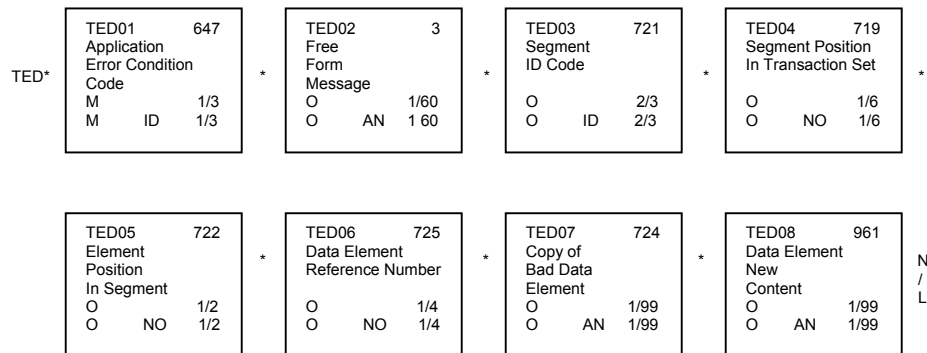
- Mandatory element that represents the count of the 820 Transaction Sets.

**QTY03 UNIT OF MEASUREMENT CODE**

- Optional element, which Financial Institutions shall disregard.

**A-6.4.4 TED - Technical Error Description (Functional Group Level)**

**PURPOSE:** To identify an application error.



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**TED01 APPLICATION ERROR CONDITION CODE**

- Mandatory element.
- Must be one of the following codes:
  - 006 - duplicate;
  - 007 - missing data;
  - 008 - out of range;
  - 009 - invalid date;
  - 010 - out of balance;
  - 011 - not matching;
  - 012 - invalid combination;
  - 847 - closed/non-existent account number; or
  - ZZZ - mutually defined.

**TED02 FREE FORM MESSAGE**

- Optional element.

**TED03 SEGMENT ID CODE**

- Optional element.
- This element has limited meaning on a functional group TED segment. When used, it must be 'GS' or 'GE', to specify an error on the GS or GE segment.

**TED04 SEGMENT POSITION IN SET**

- Optional element.
- This element has no meaning on a functional group TED and if used, shall be disregarded.

**TED05 ELEMENT POSITION IN SEGMENT**

- Optional element.
- This element has limited meaning on a functional group TED segment. It may be used to specify an error in an element on the GS or GE segment.

**TED06 DATA ELEMENT REFERENCE NUMBER**

- Optional element.
- This element has limited meaning on a functional group TED segment. It may be used to specify an error in an element on the GS or GE segment.



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**TED07 COPY OF BAD DATA ELEMENT**

- Optional element.
- This element has limited meaning on a functional group TED segment. It may be used to specify an error on the GS or GE segment.

**TED08 DATA ELEMENT NEW CONTENT**

- Optional element, which financial institutions shall disregard.

**A-6.5 Transaction Set OTI Loop**

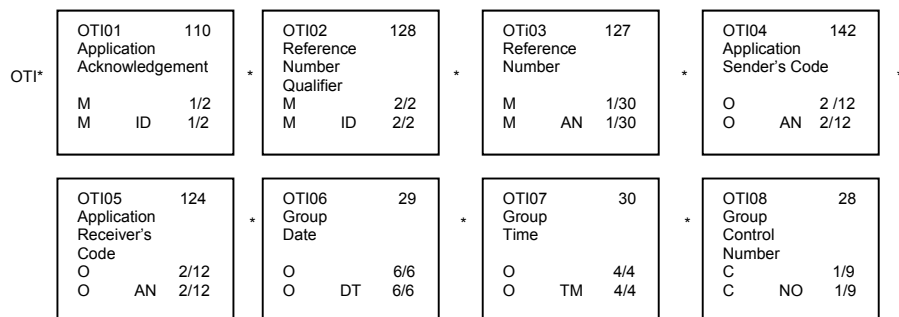
Set level OTI loops are mandatory when an error has been detected with a Transaction Set in the edited functional group. Accepted transactions shall not be identified with Transaction Set OTI groups.

SEG. ID	NAME	ASC REQ.	X12 MAX.	CDN REQ.	FI MAX.	LOOP NAME/REPEAT	COMMENTS
OTI	Original Transaction Identification	M	1	M	1	OTI/9999	If Set OTI loop used, there must only be up to 9,999 occurrences as functional is reserved for group reporting OTI, AMT & TED segments mandatory
REF	Reference Numbers	O	12	O	12		
DTM	Date/Time Reference	O	2	O	2		
PER	Administrative						
AMT	Monetary Amount	O	10	M	10		
QTY	Quantity	O	10	M	10		
TED	Technical Error Description	O	1	O	1	TED/10000	
NTE	Note/Special Instruction	O	100	O	100		

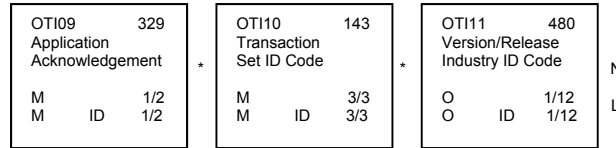
The TED segments identify each error in the Transaction Set.

**A-6.5.1 OTI - Original Identification (Transaction Set Level)**

**PURPOSE:** To identify a Transaction Set and indicate in detail the errors detected in application editing.



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**OTI01 APPLICATION ACKNOWLEDGMENT CODE**

- Mandatory element.
- Must be the following code:

TR - Transaction Set reject.

**OTI02 REFERENCE NUMBER QUALIFIER**

- Mandatory element.
- Must be `RR`.

**OTI03 REFERENCE NUMBER**

- Mandatory element, intended to identify the transaction set that has been edited.
- Must contain the same number used to uniquely identify the 820 Transaction Set in the Functional Group that was edited.
- Must be REF02 from the original 820 when REF01 is `RR`.

**OTI04 APPLICATION SENDER'S CODE**

- Optional element, which Financial Institutions shall disregard.

**OTI05 APPLICATION RECEIVER'S CODE**

- Optional element, which Financial Institutions shall disregard.

**OTI06 GROUP DATE**

- Optional element, which Financial Institutions shall disregard.

**OTI07 GROUP TIME**

- Optional element, which Financial Institutions shall disregard.

**OTI08 GROUP CONTROL NUMBER**

- Conditional element.
- This element must be specified if OTI09 is specified.





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**OTI09 TRANSACTION SET CONTROL NUMBER**

- Mandatory element, intended to identify the Transaction Set that has been edited.
- Must contain the same value used in ST02 for the Transaction Set that was edited.

**OTI10 TRANSACTION SET IDENTIFIER**

- Mandatory element.
- Must contain the same value used in ST01 for the Transaction Set that was edited.

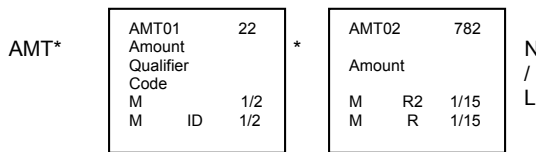
**OTI11 VERSION/RELEASE ID**

- Optional element, which Financial Institutions shall disregard.

**A-6.5.2 AMT - Monetary Amount (Transaction Set Level)**

**PURPOSE:** To indicate the total monetary amount of the Transaction Set in error.

The Direct or Indirect Participant which has received the Transaction Set shall use the AMT segment to indicate the monetary amount of the Transaction Set in error to the Direct or Indirect Participant that has originated that Transaction Set.



When an 820 is in error, BPS02 amount must be reported.

**AMT01 AMOUNT QUALIFIER CODE**

- Mandatory element.
- Includes only those Transaction Sets that have passed syntax checks.
- Must be `BT' (bank reject total).

**AMT02 AMOUNT**

- Mandatory element.
- Maximum of two decimal places.

**A-6.5.3 QTY - Quantity (Transaction Set Level)**

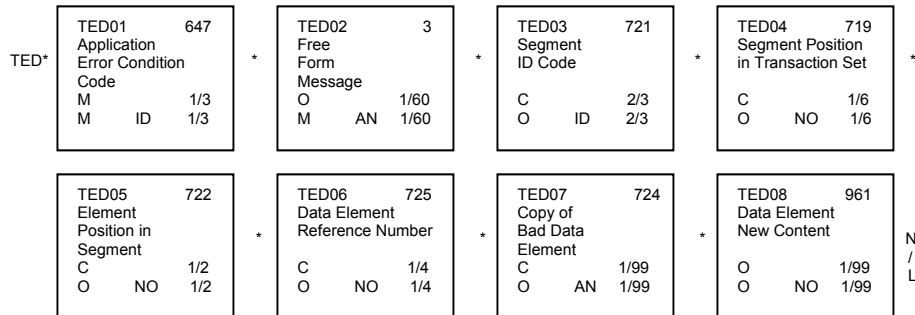
This is an optional segment, which Financial Institutions shall disregard.



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**A-6.5.4 TED - Error Description (Transaction Set Level)**

**PURPOSE:** To identify an application error.



**TED01 APPLICATION ERROR CONDITION CODE**

- Mandatory element.
- Must be one of the following codes:

006 - duplicate;  
007 - missing data;  
008 - out of range;  
009 - invalid date;  
010 - out of balance;  
011 - not matching;  
012 - invalid combination;  
847 - closed/non-existent account number; or  
ZZZ - mutually defined.

**TED02 FREE FORM MESSAGE**

- Optional element.

**TED03 SEGMENT ID CODE**

- Conditional element.
- If used, must be one of the following codes which indicate the segments from an 820 Transaction Set that has been edited and found to be in error: `BPS`, `CUR`, `REF`, `DTM` or N1.

**TED04 SEGMENT POSITION IN TRANSACTION SET**

- Conditional element.
- The position of the segment in error, counted from the start of the Transaction Set (ST is position 1).



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**TED05 ELEMENT POSITION IN SEGMENT**

- Conditional element.
- This element must be specified if the error is with a specific element on a specific segment.

**TED06 DATA ELEMENT REFERENCE NUMBER**

- Conditional element.
- This element must be specified if TED05 is specified.

**TED07 COPY OF BAD DATA ELEMENT**

- Conditional element.
- This element must be specified when TED01 is '006', '008', '009', '010', '011' or '012', '847' or 'ZZZ'.

**TED08 DATA ELEMENT NEW CONTENT**

- Optional element, which financial institutions shall disregard.

**A-7 997 - FUNCTIONAL ACKNOWLEDGMENT**

*(Note: The 997 does not cover any semantic level processing (i.e. the meaning of a transaction). This level of analysis is handled by the 824 - Application Advice.)*

A 997 is used by Direct and Indirect Participants to indicate the results of ASC X12 syntax checking of Transaction Sets and Functional Group enveloping. Success or failure at the Functional Group level is reported with a positive or negative 997 respectively. A 997 must be returned in response to any Transaction Set other than a 997 Transaction Set. However, at the Transaction Set level, only rejected transactions shall be reported with a negative 997. Accepted transactions shall therefore not be reported at the 997 (AK2) Transaction Set level.

SEG. ID	NAME	ASC REQ.	X12 MAX.	CDN REQ.	FI MAX.	LOOP NAME/REPEAT	COMMENTS
ST	Transaction Set Header	M	1	M	1		
AK1	Functional Group	M	1	M	1		Loop AK2 is optional, but
AK2	Transaction Set	O	1	O	1	AK2/999999	If used, segments AK2 & AK5 are mandatory.
	Response Header						
Ak3	Data Segment Note	0	1	0	1	Ak3/999999	Loop AK3 is optional, but if used, segments AK2, AK3 and AK5 are mandatory
AK4	Data Element Note	O	99	O	99		
AK5	Transaction Set Response Trailer	M	1	M	1		
AK9	Functional Group Response Trailer	M	1	M	1		
SE	Transaction Set Trailer	M	1	M	1		



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**A-7.1 AK1 - Functional Group Response Header**

**PURPOSE:** To indicate the beginning of the acknowledgment of a Functional Group.

AK1*	AK101	479	*	AK102	28	N / L
	Functional ID Code			Group Control Number		
	M	2/2		M	1/9	
	M	ID 2/2		M	NO 1/9	

**AK101 FUNCTIONAL IDENTIFIER CODE**

- Mandatory element.
- Code identifying a group of related Transaction Sets.
- Must be one of the following codes:

RA - for payment order/remittance advice (820); or  
 AG - for application advice (824).

**AK102 GROUP CONTROL NUMBER**

- Mandatory element.
- Taken from GS06 of the Functional Group being acknowledged.

**A-7.2 AK2 - Transaction Set Response Header**

**PURPOSE:** To indicate the beginning of the acknowledgment of a single rejected Transaction Set.

AK2*	AK201	143	*	AK202	479	N / L
	Transaction Set ID Code			Trans. Set Control Number		
	M	3/3		M	4/9	
	M	ID 3/3		M	ID 4/9	

**AK201 TRANSACTION SET IDENTIFIER CODE**

- Mandatory element.
- Code of Transaction Set being acknowledged (e.g., 820 for payment order/remittance advice).

**AK202 TRANSACTION SET CONTROL NUMBER**

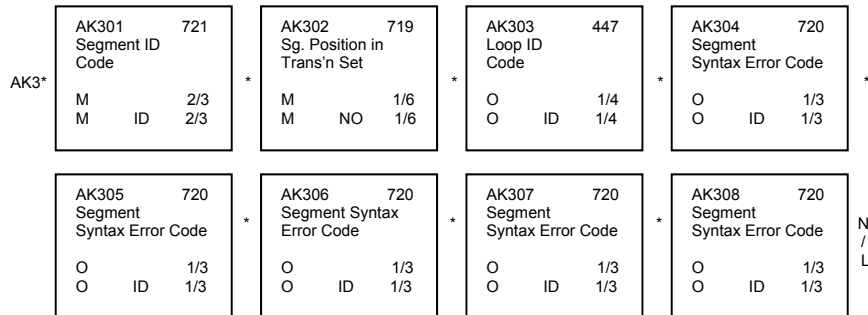
- Mandatory element.
- Taken from ST02 of the Transaction Set being acknowledged.



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**A-7.3 AK3 - Data Segment Note**

**PURPOSE:** To report errors in a Data Segment and to identify the location of the Data Segment.



**AK301 SEGMENT ID CODE**

- Mandatory element.
- Code defining the ID of the Data Segment in error (e.g., BPS or N1).

**AK302 SEGMENT POSITION IN TRANSACTION SET**

- Mandatory element.
- The position of the segment in error, counted from the start of the Transaction Set (ST is position 1).

**AK303 LOOP ID CODE**

- Optional element.
- Code identifying a loop in the Transaction Set (taken from corresponding LS01 and LE01).

**AK304 | AK308 SEGMENT SYNTAX ERROR CODE**

- Optional elements.
- Code indicating a syntax error in a segment.
- When used, must be one of the following codes:

- 1 - unrecognized segment ID;
- 2 - unexpected segment;
- 3 - mandatory segment missing;
- 4 - loop occurs over maximum times;
- 5 - segment exceed maximum use;
- 6 - segment not in defined transaction set; or
- 7 - segment not in proper sequence.



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**A-7.4 AK4 - Data Element Note**

**PURPOSE:** To report errors in a Data Element and to identify the location of the Data Segment.

AK4*	AK401	722	*	AK402	725	*	AK403	723	*	AK404	724	N / L
	Element			Data Element			Data Element			Copy of Bad		
	Position in			Reference Number			Syntax Error Code			Data Element		
	Segment											
M	1/2	O	1/4	M	1/3	O	1/99	O	1/99			
M	NO 1/2	O	NO 1/4	M	ID 1/3	O	ID 1/99	O	ID 1/99			

**AK401 ELEMENT POSITION IN SEGMENT**

- Mandatory element.
- Indicates the relative position of the Data Element in error within a Data Segment.
- Count starts with 1 for the Data Element immediately following the segment ID (0 for an error in the segment ID itself).

**AK402 DATA ELEMENT REFERENCE NUMBER**

- Optional element.
- The reference number used to locate the data element in the ASC X12 Data Element Dictionary.

**AK403 DATA ELEMENT SYNTAX ERROR CODE**

- Mandatory element.
- Code indicating a syntax error in the data element.
- Must be one of the following codes:

- 1 - mandatory data element missing;
- 2 - conditional required data element missing;
- 3 - too many data elements;
- 4 - data element too short;
- 5 - data element too long;
- 6 - invalid character in data element;
- 7 - invalid code value per sequence;
- 8 - invalid date; or
- 9 - invalid time.

**AK404 COPY OF BAD DATA ELEMENT**

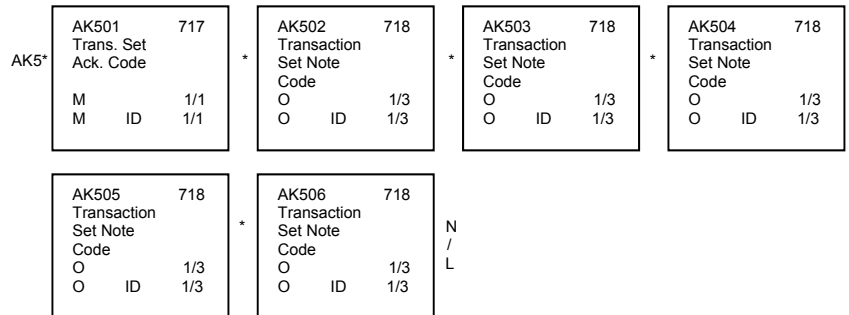
- Optional element.
- A copy of the bad data element in error.



**APPENDIX A - SPECIFICATIONS FOR EDI TRANSACTION SETS**  
*(based on ASC x12 Version Release 003010)*

**A-7.5 AK5 - Transaction Set Response Trailer**

**PURPOSE:** To indicate rejection and to report errors in a Transaction Set.



**AK501 TRANSACTION SET ACKNOWLEDGMENT CODE**

- Mandatory element.
- Code indicating the syntax level acceptance or rejection of a Transaction Set.
- Must be one of the following codes:

A - accepted; or  
R - rejected.

**AK502→AK506 TRANSACTION SET SYNTAX ERROR CODE**

- Optional elements.
- Code indicating a syntax level error found in a Transaction Set.
- When used, must be one of the following codes:

- 1 - transaction set not supported;
- 2 - transaction set trailer missing;
- 3 - transaction set control number in header and trailer do not match;
- 4 - number of included segments does not match actual count;
- 5 - one or more segments in error;
- 6 - missing or invalid transaction set identifier; or
- 7 - missing or invalid transaction set control number.

**A-7.6 AK9 - Functional Group Response Trailer**

**PURPOSE:** To acknowledge acceptance or rejection of a Functional Group, and to report the number of included Transaction Sets from the original trailer, the received sets and the accepted sets in this Functional Group.



**APPENDIX A - SPECIFICATIONS FOR EDI TRANSACTION SETS**  
*(based on ASC x12 Version Release 003010)*

AK9*	AK901	715	*	AK902	97	*	AK903	123	*	AK904	2	*				
	Functional Group Ack Code			Number of Included Sets			Number of Received Sets			Number of Accepted Sets						
	M	1/1		M	1/6		M	1/6		M	1/6					
	M	ID 1/1		M	NO 1/6		M	NO 1/6		M	NO 1/6					
	AK905			AK906			AK907			AK908						
	Functional Group Syntax Error Group			Functional Group Syntax Error Code			Functional Group Syntax Error Group			Functional Group Syntax Error Group						
	O			O			O			O						
	ID 1/3			ID 1/3			ID 1/3			ID 1/3						
	O			O			O			O						
ID 1/3			ID 1/3			ID 1/3			ID 1/3							
AK909			N / L	AK909			AK909			AK909						
Functional Group Syntax Error Code				Functional Group Syntax Error Code			Functional Group Syntax Error Code			Functional Group Syntax Error Code						
O				O			O			O						
ID 1/3			ID 1/3			ID 1/3			ID 1/3							
O			O			O			O							
ID 1/3			ID 1/3			ID 1/3			ID 1/3							

**AK901 FUNCTIONAL GROUP ACKNOWLEDGMENT CODE**

- Mandatory element.
- Code indicating the syntax level acceptance or rejection of a Functional Group.
- Must be one of the following codes:

A - accepted;  
P - at least one Transaction Set was rejected; or  
R - rejected (all Transaction Sets within the Functional Group).

**AK902 NUMBER OF INCLUDED SETS**

- Mandatory element.
- The total number of Transaction Sets included in the Functional Group being acknowledged (taken from GE01).

**AK903 NUMBER OF RECEIVED SETS**

- Mandatory element.
- The total number of Transaction Sets received.

**AK904 NUMBER OF ACCEPTED SETS**

- Mandatory element.
- The number of accepted Transaction Sets in a Functional Group.

**AK905→AK909 FUNCTIONAL GROUP SYNTAX ERROR CODE**

- Optional elements.
- Code indicating a syntax level error in the Functional Group header and/or trailer.





**APPENDIX A - SPECIFICATIONS FOR EDI TRANSACTION SETS**  
***(based on ASC x12 Version Release 003010)***

- When used, must be one of the following codes:
  - 1 - Functional Group not supported;
  - 2 - Functional Group version not supported;
  - 3 - Functional Group trailer missing;
  - 4 - data interchange control number in the Functional Group header and trailer do not agree; or
  - 5 - number of included Transaction Sets does not match actual count.



**APPENDIX B - SPECIFICATIONS FOR EDI TRANSACTION SETS**  
***(based on ASC x12 Version Release 003020)***

The Canadian inter-FI specifications for EDI transaction sets based on ASC X12 Version Release 003020 are identical to those based on ASC X12 Version Release 003030, with the following exceptions:

- B-1** The minimum/maximum length of SE01 - Number of Included Segments is 1/6.
  
- B-2** The value of GS08 - Version/Release/Industry Identifier Code is '003020'.
  
- B-3** Position 272 to position 285 inclusive in the detail area/table two (i.e., remittance advice portion) of the 820 - Payment Order/Remittance Advice Transaction Set, do not exist.
  
- B-4** The optional Data Element BPR17 - Business Function Code in segment BPR - Beginning Segment for Payment Order/Remittance Advice, does not exist.
  
- B-5** The optional Data Elements BGN06 - Reference Number and BGN07 - Transaction Type Code in segment BGN - Beginning Segment, do not exist.
  
- B-6** The Data Element code number `23 - Transaction Set Control Number not unique within the Functional Group', does not exist for use in the AK502 to AK506 - Transaction Set Syntax Error Code Data Elements.



**APPENDIX C - SPECIFICATIONS FOR EDI TRANSACTION SETS**  
**(based on ASC x12 Version Release 003030)**

The Canadian inter-FI specifications for EDI Transaction Sets based on ASC X12 Version Release 003030 are identical to those based on ASC X12 Version Release 003040, with the following exceptions:

- C-1** The minimum/maximum length of GS05 - Time, BGN04 - Time, and OTI07 - Time is 4/6.
- C-2** The value of GS08 - Version/Release/Industry Identifier Code is '003030'.
- C-3** Position 105, position 142 to position 148 inclusive, position 202 to position 208 inclusive, and position 290 to position 355 inclusive, in the detail area/table 2 (i.e., remittance advice portion) of the 820 - Payment Order/Remittance Advice Transaction Set, do not exist.
- C-4** For migration purposes, 'X' may be used instead of 'C' in BPR01 - Transaction Handling Code to specify that payment accompanies remittance advice.
- C-5** The optional Data Elements BPR18 - (DFI) ID Number Qualifier, BPR19 - (DFI) Identification Number, BPR20 - Account Number Qualifier Code, and BPR21 - Account Number in segment BPR - Beginning Segment for Payment Order/Remittance Advice, do not exist.
- C-6** The optional Data Elements N105 - Entity Relationship Code and N106 - Entity Identifier Code in segment N1 - Name, do not exist.
- C-7** The maximum repeat of the TED - Technical Error Description loop and the OTI - Original Transaction Identification loop in the 824 - Application Advice Transaction Set is 10,000.
- C-8** Position 065, and position 085 to position 086 inclusive, in table 2 of the 824 - Application Advice Transaction Set, do not exist.
- C-9** The optional data element BGN08 - Action Code in segment BGN - Beginning Segment, does not exist.



**APPENDIX D - SPECIFICATIONS FOR EDI TRANSACTION SETS**  
**(based on ASC x12 Version Release 003040)**

The Canadian inter-FI specifications for EDI transaction sets based on ASC X12 Version Release 003040 are identical to those based on ASC X12 Version Release 003050, with the following exceptions:

- D-1** The composite data structure is not described since it is not used.
- D-2** The purpose of the ISA - Interchange Control Header segment is "to start and identify an interchange of one or more Functional Groups and interchange-related control segments"; and the purpose of the IEA - Interchange Control Trailer segment is "to define the end of an interchange of one or more Functional Groups and interchange-related control segments".
- D-3** The value of GS08 - Version/Release/Industry Identifier Code is '003040'.
- D-4** Positions 142, 147, 202, 207, 272 and 277 in the detail area/table 2 (i.e., remittance advice portion) of the 820 - Payment Order/Remittance Advice Transaction Set have a segment identifier of ITA - Allowance, Charge or Service.
- D-5** Position 287 (DED - Deductions) in the detail area/table 2 (i.e., remittance advice portion) of the 820 - Payment Order/Remittance Advice, does not exist.
- D-6** The minimum/maximum length of BPR01 - Transaction Handling Code is 1/1.
- D-7** The Data Element code number used in BPR08, BPR14, and BPR20 is '896' (Account Number Qualifier Code); and the minimum/maximum length of BPR08, BPR14 and BPR20 is 2/2.
- D-8** The Data Element code number used in BPR16 is '513' (Effective Entry Date).
- D-9** The minimum/maximum length of N104 - Identification Code is 2/17.
- D-10** The maximum repeat of the N1 - Name loop in the header area of the 824 - Application Advice Transaction Set is 2.
- D-11** Data Element AMT03 - Credit/Debit Flag Code in segment AMT - Monetary Amount, does not exist.



**APPENDIX D - SPECIFICATIONS FOR EDI TRANSACTION SETS**  
***(based on ASC x12 Version Release 003040)***

- D-12** Segment AK3 - Data Segment Note includes AK305-AK308 - Segment Syntax Error Code.
- D-13** Code value '8' (segment has data element errors), for use in AK304 - Segment Syntax Error Code of the AK3 - Data Segment Note segment, does not exist.
- D-14** The Data Element code number used in AK401 is not a composite Data Element. It is '722' (Element Position in Segment), with a minimum/maximum length of 1/2 and a Data Element type of 'NO'.
- D-15** Code value '10' (exclusion condition violated), for use in AK403 - Data Element Syntax Error Code of the AK4 - Data Element Note segment, does not exist.



**APPENDIX E - SPECIFICATIONS FOR EDI TRANSACTION SETS**  
**(based on ASC x12 Version Release 003050)**

The Canadian inter-FI specifications for EDI transactions sets based on ASC X12 Version 3050 are identical to those based on ASC X12 Version Release 004010, with the following exceptions:

- E-1 The data element code 373, "Date" used in GS04, DTM02, BPR16, and OT106 has a minimum and maximum length of 6/6 (YYMMDD).
- E-2 The transaction handling codes available in BPR01 are : D – make payment only; or C – payment accompanies remittance advice.
- E-3 The composite data element REF04 – Reference Identifier, does not exist.
- E-4 The minimum and maximum length of data element 98 used in N101 is 2/2.
- E-5 The minimum and maximum length of data element 93 used in N102 is 1/35.
- E-6 The minimum and maximum length of data element 67 use din N104 is 2/20.
- E-7 The minimum and maximum length of data element 128 used in OT102 and REF 01 is 2/2.
- E-8 The data element code number used in QTY03 is 355 "Unit for Measurement Code".
- E-9 The minimum and maximum length of data element 522 used in AMT01 is ½.
- E-10 GS08, "Version/Release/Industry Identifier Code" must be, "003050".
- E-11 ISA12, "Interchange Control Version Number" must be, "00300".

