

997

Functional Acknowledgment

Functional Group=FA

This Draft Standard for Trial Use contains the format and establishes the data contents of the Functional Acknowledgment Transaction Set (997) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to define the control structures for a set of acknowledgments to indicate the results of the syntactical analysis of the electronically encoded documents. The encoded documents are the transaction sets, which are grouped in functional groups, used in defining transactions for business data interchange. This standard does not cover the semantic meaning of the information encoded in the transaction sets.

Not Defined:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	ISA	Interchange Control Header	M	1			Must use
	GS	Functional Group Header	M	1			Must use

Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1		N1/010	Must use
020	AK1	Functional Group Response Header	M	1		N1/020	Must use

<u>LOOP ID - AK2</u>					<u>999999</u>	<u>N1/030L</u>	
030	AK2	Transaction Set Response Header	O	1		N1/030	Used
<u>LOOP ID - AK3</u>					<u>999999</u>	<u>C1/040L</u>	
040	AK3	Data Segment Note	O	1		C1/040	Used
050	AK4	Data Element Note	O	99			Used
060	AK5	Transaction Set Response Trailer	M	1			Must use
070	AK9	Functional Group Response Trailer	M	1			Must use
080	SE	Transaction Set Trailer	M	1			Must use

Not Defined:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	GE	Functional Group Trailer	M	1			Must use
	IEA	Interchange Control Trailer	M	1			Must use

Notes:

- 1/010 These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments. Nor shall a Functional Acknowledgment be sent to report errors in a previous Functional Acknowledgment.
The Functional Group Header Segment (GS) is used to start the envelope for the Functional Acknowledgment Transaction Sets. In preparing the functional group of acknowledgments, the application sender's code and the application receiver's code, taken from the functional group being acknowledged, are exchanged; therefore, one acknowledgment functional group responds to only those functional groups from one application receiver's code to one application sender's code.
There is only one Functional Acknowledgment Transaction Set per acknowledged functional group.
- 1/020 AK1 is used to respond to the functional group header and to start the acknowledgement for a functional group. There shall be one AK1 segment for the functional group that is being acknowledged.
- 1/030L AK2 is used to start the acknowledgement of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.
- 1/030 AK2 is used to start the acknowledgement of a transaction set within the received functional group. The

AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.

Comments:

- 1/040L The data segments of this standard are used to report the results of the syntactical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).
- 1/040 The data segments of this standard are used to report the results of the syntactical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

ISA Interchange Control Header

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 16

User Option (Usage): Must use

To start and identify an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISA01	I01	Authorization Information Qualifier Description: Code to identify the type of information in the Authorization Information All valid standard codes are used.	M	ID	2/2	Must use
ISA02	I02	Authorization Information Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)	M	AN	10/10	Must use
ISA03	I03	Security Information Qualifier Description: Code to identify the type of information in the Security Information All valid standard codes are used.	M	ID	2/2	Must use
ISA04	I04	Security Information Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)	M	AN	10/10	Must use
ISA05	I05	Interchange ID Qualifier Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified All valid standard codes are used.	M	ID	2/2	Must use
ISA06	I06	Interchange Sender ID Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element	M	AN	15/15	Must use
ISA07	I05	Interchange ID Qualifier Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified All valid standard codes are used.	M	ID	2/2	Must use
ISA08	I07	Interchange Receiver ID Description: Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them	M	AN	15/15	Must use
ISA09	I08	Interchange Date	M	DT	6/6	Must use

ISA10	I09	Description: Date of the interchange Interchange Time	M	TM	4/4	Must use
ISA11	I10	Description: Time of the interchange Interchange Control Standards Identifier Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer All valid standard codes are used.	M	ID	1/1	Must use
ISA12	I11	Interchange Control Version Number Description: Code specifying the version number of the interchange control segments All valid standard codes are used.	M	ID	5/5	Must use
ISA13	I12	Interchange Control Number Description: A control number assigned by the interchange sender	M	N0	9/9	Must use
ISA14	I13	Acknowledgment Requested Description: Code sent by the sender to request an interchange acknowledgment (TA1) All valid standard codes are used.	M	ID	1/1	Must use
ISA15	I14	Usage Indicator Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information All valid standard codes are used.	M	ID	1/1	Must use
ISA16	I15	Component Element Separator Description: Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator	M		1/1	Must use

GS Functional Group Header

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 8

User Option (Usage): Must use

To indicate the beginning of a functional group and to provide control information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GS01	479	Functional Identifier Code Description: Code identifying a group of application related transaction sets	M	ID	2/2	Must use
		Code		Name		
		AA		Account Analysis (822)		
		AB		Logistics Service Request (219)		
		AC		Associated Data (102)		
		AD		Individual Life, Annuity and Disability Application (267)		
		AE		Premium Audit Request and Return (187)		
		AF		Application for Admission to Educational Institutions (189)		
		AG		Application Advice (824)		
		AH		Logistics Service Response (220)		
		AI		Automotive Inspection Detail (928)		
		AK		Student Educational Record (Transcript) Acknowledgment (131)		
		AL		Set Cancellation (998) and Application Acceptance/Rejection Advice (499)		
		AN		Return Merchandise Authorization and Notification (180)		
		AO		Income or Asset Offset (521)		
		AP		Abandoned Property Filings (103)		
		AR		Warehouse Stock Transfer Shipment Advice (943)		
		AS		Transportation Appointment Schedule Information (163)		
		AT		Animal Toxicological Data (249)		
		AW		Warehouse Inventory Adjustment Advice (947)		
		BC		Business Credit Report (155)		
		BE		Benefit Enrollment and Maintenance (834)		
		BF		Business Entity Filings (105)		
		BL		Motor Carrier Bill of Lading (211)		
		BS		Shipment and Billing Notice (857)		
		CA		Purchase Order Change Acknowledgment/Request - Seller Initiated (865)		
		CB		Unemployment Insurance Tax Claim or Charge Information (153)		
		CC		Clauses and Provisions (504)		
		CD		Credit/Debit Adjustment (812)		
		CE		Cartage Work Assignment (222)		
		CF		Corporate Financial Adjustment Information (844 and 849)		
		CG		Administrative Message (994)		
		CH		Car Handling Information (420)		
		CI		Consolidated Service Invoice/Statement (811)		
		CJ		Manufacturer Coupon Family Code Structure (877)		
		CK		Manufacturer Coupon Redemption Detail (881)		
		CM		Component Parts Content (871)		
		CN		Coupon Notification (887)		

CO	Cooperative Advertising Agreements (290)
CP	Electronic Proposal Information (251, 805)
CR	Rail Carhire Settlements (414)
CS	Cryptographic Service Message (815)
CT	Application Control Totals (831)
CV	Commercial Vehicle Safety and Credentials Information Exchange (285)
D3	Contract Completion Status (567)
D4	Contract Abstract (561)
D5	Contract Payment Management Report (568)
DA	Debit Authorization (828)
DD	Shipment Delivery Discrepancy Information (854)
DF	Market Development Fund Allocation (883)
DI	Dealer Information (128)
DM	Shipper's Car Order (422)
DS	Data Status Tracking (242)
DX	Direct Exchange Delivery and Return Information (894, 895)
EC	Educational Course Inventory (188)
ED	Student Educational Record (Transcript) (130)
EI	Railroad Equipment Inquiry or Advice (456)
ER	Revenue Receipts Statement (170)
ES	Notice of Employment Status (540)
EV	Railroad Event Report (451)
EX	Excavation Communication (620)
FA	Functional Acknowledgment (997)
FB	Freight Invoice (859)
FC	Court and Law Enforcement Information (175, 176)
FG	Motor Carrier Loading and Route Guide (217)
FH	Motor Carrier Tariff Information (218)
FR	Financial Reporting (821, 827)
FT	File Transfer (996)
GB	Average Agreement Demurrage (423)
GC	Damage Claim Transaction Sets (920, 924, 925, 926)
GE	General Request, Response or Confirmation (814)
GF	Response to a Load Tender (990)
GL	Intermodal Group Loading Plan (715)
GP	Grocery Products Invoice (880)
GR	Statistical Government Information (152)
GT	Grant or Assistance Application (194)
HB	Eligibility, Coverage or Benefit Information (271)
HC	Health Care Claim (837)
HI	Health Care Services Review Information (278)
HN	Health Care Claim Status Notification (277)
HP	Health Care Claim Payment/Advice (835)
HR	Health Care Claim Status Request (276)
HS	Eligibility, Coverage or Benefit Inquiry (270)
IA	Air Freight Details and Invoice (110, 980)
IB	Inventory Inquiry/Advice (846)
IC	Rail Advance Interchange Consist (418)
ID	Insurance/Annuity Application Status (273)
IE	Insurance Producer Administration (252)
IF	Individual Insurance Policy and Client Information (111)
IG	Direct Store Delivery Summary Information (882)

II	Rail Freight Details and Invoice Summary (411)
IJ	Report of Injury, Illness or Incident (148)
IM	Motor Carrier Freight Details and Invoice (210, 980)
IN	Invoice Information (810,819)
IO	Ocean Shipment Billing Details (310, 312, 980)
IP	Intermodal Ramp Activity (622)
IR	Rail Carrier Freight Details and Invoice (410, 980)
IS	Estimated Time of Arrival and Car Scheduling (421)
KM	Commercial Vehicle Credentials (286)
LA	Federal Communications Commission (FCC) License Application (195)
LB	Lockbox (823)
LI	Locomotive Information (436)
LN	Property and Casualty Loss Notification (272)
LR	Logistics Reassignment (536)
LS	Asset Schedule (851)
LT	Student Loan Transfer and Status Verification (144)
MA	Motor Carrier Summary Freight Bill Manifest (224)
MC	Request for Motor Carrier Rate Proposal (107)
MD	Department of Defense Inventory Management (527)
ME	Mortgage Origination (198, 200, 201, 261, 262, 263, 833, 872)
MF	Market Development Fund Settlement (884)
MG	Mortgage Servicing Transaction Sets (203, 206, 260, 264, 266)
MH	Motor Carrier Rate Proposal (106)
MI	Motor Carrier Shipment Status Inquiry (213)
MJ	Secondary Mortgage Market Loan Delivery (202)
MK	Response to a Motor Carrier Rate Proposal (108)
MM	Medical Event Reporting (500)
MN	Mortgage Note (205)
MO	Maintenance Service Order (650)
MP	Motion Picture Booking Confirmation (159)
MQ	Consolidators Freight Bill and Invoice (223)
MR	Multilevel Railcar Load Details (125)
MS	Material Safety Data Sheet (848)
MT	Electronic Form Structure (868)
MV	Material Obligation Validation (517)
MW	Rail Waybill Response (427)
MX	Material Claim (847)
MY	Response to a Cartage Work Assignment (225)
MZ	Motor Carrier Package Status (240)
NC	Nonconformance Report (842)
NL	Name and Address Lists (101)
NP	Notice of Power of Attorney (157)
NT	Notice of Tax Adjustment or Assessment (149)
OC	Cargo Insurance Advice of Shipment (362)
OG	Order Group - Grocery (875, 876)
OR	Organizational Relationships (816)
OW	Warehouse Shipping Order (940)
PA	Price Authorization Acknowledgment/Status (845)
PB	Railroad Parameter Trace Registration (455)
PC	Purchase Order Change Request - Buyer Initiated (860)
PD	Product Activity Data (852)
PE	Periodic Compensation (256)

PF	Annuity Activity (268)
PG	Insurance Plan Description (100)
PH	Pricing History (503)
PI	Patient Information (275)
PJ	Project Schedule Reporting (806)
PK	Project Cost Reporting (839) and Contractor Cost Data Reporting (196)
PL	Railroad Problem Log Inquiry or Advice (452)
PN	Product Source Information (244)
PO	Purchase Order (850)
PQ	Property Damage Report (112)
PR	Purchase Order Acknowledgement (855)
PS	Planning Schedule with Release Capability (830)
PT	Product Transfer and Resale Report (867)
PU	Motor Carrier Shipment Pick-up Notification (216)
PV	Purchase Order Shipment Management Document (250)
PW	Healthcare Provider Information (274)
PY	Payment Cancellation Request (829)
QG	Product Information (878, 879, 888, 889, 893, 896)
QM	Transportation Carrier Shipment Status Message (214)
QO	Ocean Shipment Status Information (313, 315)
RA	Payment Order/Remittance Advice (820)
RB	Railroad Clearance (470)
RC	Receiving Advice/Acceptance Certificate (861)
RD	Royalty Regulatory Report (185)
RE	Warehouse Stock Receipt Advice (944)
RH	Railroad Reciprocal Switch File (433)
RI	Routing and Carrier Instruction (853)
RJ	Railroad Mark Register Update Activity (434)
RK	Standard Transportation Commodity Code Master (435)
RL	Rail Industrial Switch List (423)
RM	Railroad Station Master File (431)
RN	Requisition Transaction (511)
RO	Ocean Booking Information (300, 301,303)
RP	Commission Sales Report (818)
RQ	Request for Quotation (840) and Procurement Notices (836)
RR	Response to Request For Quotation (843)
RS	Order Status Information (869, 870)
RT	Report of Test Results (863)
RU	Railroad Retirement Activity (429)
RV	Railroad Junctions and Interchanges Activity (437)
RW	Rail Revenue Waybill (426)
RX	Rail Deprescription (432)
RY	Request for Student Educational Record (Transcript) (146)
RZ	Response to Request for Student Educational Record (Transcript) (147)
SA	Air Shipment Information (104)
SB	Switch Rails (424)
SC	Price/Sales Catalog (832)
SD	Student Loan Pre-Claims and Claims (191)
SE	Shipper's Export Declaration (601)
SG	SG Receiving Advice - Grocery (885)
SH	Ship Notice/Manifest (856)
SI	Shipment Information (858)

SJ	Transportation Automatic Equipment Identification (160)
SL	Student Loan Application and Guarantee (135, 139)
SM	Motor Carrier Load Tender (204)
SN	Rail Route File Maintenance (475)
SO	Ocean Shipment Information (304, 306, 309, 311, 317, 319, 321, 322, 323, 324, 325, 350, 352, 353, 354, 355, 356, 357, 358, 361)
SP	Specifications/Technical Information (841)
SQ	Production Sequence (866)
SR	Rail Carrier Shipment Information (404, 419)
SS	Shipping Schedule (862)
ST	Railroad Service Commitment Advice (453)
SU	Account Assignment/Inquiry and Service/Status (248)
SV	Student Enrollment Verification (190)
SW	Warehouse Shipping Advice (945)
TA	Electronic Filing of Tax Return Data Acknowledgment (151)
TC	Court Submission (176)
TD	Trading Partner Profile (838)
TF	Electronic Filing of Tax Return Data (813)
TI	Tax Information Exchange (826)
TM	Motor Carrier Delivery Trailer Manifest (212)
TN	Tax Rate Notification (150)
TO	Real Estate Title Services (197, 199, 265)
TP	Rail Rate Transactions (460, 463, 466, 468, 485, 486, 490, 492, 494)
TR	Train Sheet (161)
TS	Transportation Services Tender (602)
TT	Education Testing Results Request and Report (138)
TX	Text Message (864)
UA	Retail Account Characteristics (885)
UB	Customer Call Reporting (886)
UC	Uniform Commercial Code Filing (154)
UD	Deduction Research Report (891)
UI	Underwriting Information Services (255)
UP	Motor Carrier Pick-up Manifest (215)
UW	Insurance Underwriting Requirements Reporting (186)
VA	Vehicle Application Advice (126)
VB	Vehicle Baying Order (127)
VC	Vehicle Shipping Order (120)
VD	Vehicle Damage (124)
VE	Vessel Content Details (109)
VH	Vehicle Carrier Rate Update (129)
VI	Voter Registration Information (280)
VS	Vehicle Service (121)
WA	Product Service Transaction Sets (140, 141, 142, 143)
WB	Rail Carrier Waybill Interchange (417)
WG	Vendor Performance Review (501)
WI	Wage Determination (288)
WL	Well Information (625)
WR	Shipment Weights (440)
WT	Rail Waybill Request (425)

GS02 142 **Application Sender's Code** M AN 2/15 Must use
Description: Code identifying party sending transmission; codes agreed to by trading partners

GS03	124	Application Receiver's Code Description: Code identifying party receiving transmission; codes agreed to by trading partners	M	AN	2/15	Must use
GS04	373	Date Description: Date expressed as CCYYMMDD	M	DT	8/8	Must use
GS05	337	Time Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	M	TM	4/8	Must use
GS06	28	Group Control Number Description: Assigned number originated and maintained by the sender	M	N0	1/9	Must use
GS07	455	Responsible Agency Code Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480 All valid standard codes are used.	M	ID	1/2	Must use
GS08	480	Version / Release / Industry Identifier Code Description: Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed All valid standard codes are used.	M	AN	1/12	Must use

Semantics:

1. GS04 is the group date.
2. GS05 is the group time.
3. The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

Comments:

1. A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.

ST Transaction Set Header

Pos: 010	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

To indicate the start of a transaction set and to assign a control number

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	Transaction Set Identifier Code Description: Code uniquely identifying a Transaction Set All valid standard codes are used.	M	ID	3/3	Must use
ST02	329	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Must use

Semantics:

1. The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

AK1 Functional Group Response Header

Pos: 020	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

To start acknowledgment of a functional group

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK101	479	Functional Identifier Code Description: Code identifying a group of application related transaction sets All valid standard codes are used.	M	ID	2/2	Must use
AK102	28	Group Control Number Description: Assigned number originated and maintained by the sender	M	N0	1/9	Must use

Semantics:

1. AK101 is the functional ID found in the GS segment (GS01) in the functional group being acknowledged.
2. AK102 is the functional group control number found in the GS segment in the functional group being acknowledged.

Loop AK2

Pos: 030	Repeat: 999999
Optional	
Loop: AK2	Elements: N/A

To start acknowledgment of a single transaction set

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
030	AK2	Transaction Set Response Header	O	1		Used
040		Loop AK3	O		999999	Used
060	AK5	Transaction Set Response Trailer	M	1		Must use

AK2 Transaction Set Response Header

Pos: 030	Max: 1
Heading - Optional	
Loop: AK2	Elements: 2

User Option (Usage): Used

To start acknowledgment of a single transaction set

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK201	143	Transaction Set Identifier Code Description: Code uniquely identifying a Transaction Set All valid standard codes are used.	M	ID	3/3	Must use
AK202	329	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Must use

Semantics:

1. AK201 is the transaction set ID found in the ST segment (ST01) in the transaction set being acknowledged.
2. AK202 is the transaction set control number found in the ST segment in the transaction set being acknowledged.

Loop AK3

Pos: 040	Repeat: 999999
Optional	
Loop: AK3	Elements: N/A

To report errors in a data segment and identify the location of the data segment

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
040	AK3	Data Segment Note	O	1		Used
050	AK4	Data Element Note	O	99		Used

AK3 Data Segment Note

Pos: 040	Max: 1
Heading - Optional	
Loop: AK3	Elements: 4

User Option (Usage): Used

To report errors in a data segment and identify the location of the data segment

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK301	721	Segment ID Code Description: Code defining the segment ID of the data segment in error (See Appendix A - Number 77)	M	ID	2/3	Must use
AK302	719	Segment Position in Transaction Set Description: The numerical count position of this data segment from the start of the transaction set: the transaction set header is count position 1	M	N0	1/6	Must use
AK303	447	Loop Identifier Code Description: The loop ID number given on the transaction set diagram is the value for this data element in segments LS and LE	O	AN	1/6	Used
AK304	720	Segment Syntax Error Code Description: Code indicating error found based on the syntax editing of a segment All valid standard codes are used.	O	ID	1/3	Used

AK4 Data Element Note

Pos: 050	Max: 99
Heading - Optional	
Loop: AK3	Elements: 4

User Option (Usage): Used

To report errors in a data element or composite data structure and identify the location of the data element

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK401	C030	Position in Segment Description: Code indicating the relative position of a simple data element, or the relative position of a composite data structure combined with the relative position of the component data element within the composite data structure, in error; the count starts with 1 for the simple data element or composite data structure immediately following the segment ID	M	Comp		Must use
	722	Element Position in Segment Description: This is used to indicate the relative position of a simple data element, or the relative position of a composite data structure with the relative position of the component within the composite data structure, in error; in the data segment the count starts with 1 for the simple data element or composite data structure immediately following the segment ID	M	N0	1/2	Must use
	1528	Component Data Element Position in Composite Description: To identify the component data element position within the composite that is in error	O	N0	1/2	Used
AK402	725	Data Element Reference Number Description: Reference number used to locate the data element in the Data Element Dictionary	O	N0	1/4	Used
AK403	723	Data Element Syntax Error Code Description: Code indicating the error found after syntax edits of a data element All valid standard codes are used.	M	ID	1/3	Must use
AK404	724	Copy of Bad Data Element Description: This is a copy of the data element in error	O	AN	1/99	Used

Semantics:

1. In no case shall a value be used for AK404 that would generate a syntax error, e.g., an invalid character.

AK5 Transaction Set Response Trailer

Pos: 060	Max: 1
Heading - Mandatory	
Loop: AK2	Elements: 6

User Option (Usage): Must use

To acknowledge acceptance or rejection and report errors in a transaction set

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK501	717	Transaction Set Acknowledgment Code Description: Code indicating accept or reject condition based on the syntax editing of the transaction set All valid standard codes are used.	M	ID	1/1	Must use
AK502	718	Transaction Set Syntax Error Code Description: Code indicating error found based on the syntax editing of a transaction set All valid standard codes are used.	O	ID	1/3	Used
AK503	718	Transaction Set Syntax Error Code Description: Code indicating error found based on the syntax editing of a transaction set All valid standard codes are used.	O	ID	1/3	Used
AK504	718	Transaction Set Syntax Error Code Description: Code indicating error found based on the syntax editing of a transaction set All valid standard codes are used.	O	ID	1/3	Used
AK505	718	Transaction Set Syntax Error Code Description: Code indicating error found based on the syntax editing of a transaction set All valid standard codes are used.	O	ID	1/3	Used
AK506	718	Transaction Set Syntax Error Code Description: Code indicating error found based on the syntax editing of a transaction set All valid standard codes are used.	O	ID	1/3	Used

AK9 Functional Group Response Trailer

Pos: 070	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 9

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK901	715	Functional Group Acknowledge Code Description: Code indicating accept or reject condition based on the syntax editing of the functional group All valid standard codes are used.	M	ID	1/1	Must use
AK902	97	Number of Transaction Sets Included Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	N0	1/6	Must use
AK903	123	Number of Received Transaction Sets Description: Number of Transaction Sets received	M	N0	1/6	Must use
AK904	2	Number of Accepted Transaction Sets Description: Number of accepted Transaction Sets in a Functional Group	M	N0	1/6	Must use
AK905	716	Functional Group Syntax Error Code Description: Code indicating error found based on the syntax editing of the functional group header and/or trailer All valid standard codes are used.	O	ID	1/3	Used
AK906	716	Functional Group Syntax Error Code Description: Code indicating error found based on the syntax editing of the functional group header and/or trailer All valid standard codes are used.	O	ID	1/3	Used
AK907	716	Functional Group Syntax Error Code Description: Code indicating error found based on the syntax editing of the functional group header and/or trailer All valid standard codes are used.	O	ID	1/3	Used
AK908	716	Functional Group Syntax Error Code Description: Code indicating error found based on the syntax editing of the functional group header and/or trailer All valid standard codes are used.	O	ID	1/3	Used
AK909	716	Functional Group Syntax Error Code Description: Code indicating error found based on the syntax editing of the functional group header and/or trailer All valid standard codes are used.	O	ID	1/3	Used

Comments:

1. If AK901 contains the value "A" or "E", then the transmitted functional group is accepted.

SE Transaction Set Trailer

Pos: 080	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SE01	96	Number of Included Segments Description: Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Must use
SE02	329	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Must use

Comments:

1. SE is the last segment of each transaction set.

GE Functional Group Trailer

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

To indicate the end of a functional group and to provide control information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GE01	97	Number of Transaction Sets Included Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	N0	1/6	Must use
GE02	28	Group Control Number Description: Assigned number originated and maintained by the sender	M	N0	1/9	Must use

Semantics:

1. The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

Comments:

1. The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

IEA Interchange Control Trailer

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
IEA01	I16	Number of Included Functional Groups Description: A count of the number of functional groups included in an interchange	M	N0	1/5	Must use
IEA02	I12	Interchange Control Number Description: A control number assigned by the interchange sender	M	N0	9/9	Must use