

RHODE ISLAND Electronic Business Transactions Standard

For

Electronic
Data
Interchange

TRANSACTION SET

997

**Functional
Acknowledgment**

Ver/Rel 004010

997 Functional Acknowledgment

RHODE ISLAND SEGMENT DETAIL GUIDE

Functional Group ID=**FA**

Introduction:

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.

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
Must Use	010	ST	Transaction Set Header	M	1		n1
Must Use	020	AK1	Functional Group Response Header	M	1		n2
			LOOP ID - AK2			999999	
	030	AK2	Transaction Set Response Header	O	1		n3
			LOOP ID - AK3			999999	
	040	AK3	Data Segment Note	O	1		c1
	050	AK4	Data Element Note	O	99		
Must Use	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		

Transaction Set Notes

- 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.
- 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.
- 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.

Transaction Set Comments

- 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).

Segment: **ST** Transaction Set Header
Position: 010
Loop:
Level:
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number

RI Use: Required
Example: ST*997*000000001\

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 997 Functional Acknowledgment	M ID 3/3
Must Use	ST02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set Unique number generated by Sender's Translator	M AN 4/9

Segment: **AK1** Functional Group Response Header
Position: 020
Loop:
Level:
Usage: Mandatory
Max Use: 1
Purpose: To start acknowledgment of a functional group

RI Use: Required
Example: AK1*GE*00000040\

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	AK101	479	Functional Identifier Code Code identifying a group of application related transaction sets	M ID 2/2
			GE General Request, Response or confirmation (814)	
			IN Usage and Billing Invoice (810)	
			RA Payment Order/Remittance Advice (820)	
Must Use	AK102	28	Group Control Number Assigned number originated and maintained by the sender	M N0 1/9
			A unique transaction identification number, assigned by the originator of this transaction.	

Segment: **AK2** Transaction Set Response Header
Position: 030
Loop: AK2 Optional
Level:
Usage: Optional
Max Use: 1
Purpose: To start acknowledgment of a single transaction set

RI Use: Required
Example: AK2*814*40001\

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	AK201	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 810 814 820	M ID 3/3
Must Use	AK202	329	Transaction Set Control Number 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

Segment: **AK3** Data Segment Note
Position: 040
Loop: AK3 Optional
Level:
Usage: Optional
Max Use: 1
Purpose: To report errors in a data segment and identify the location of the data segment

RI Use: Optional
Example: AK3*\

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	AK301	721	Segment ID Code 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 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
	AK303	447	Loop Identifier Code 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
	AK304	720	Segment Syntax Error Code Code indicating error found based on the syntax editing of a segment	O ID 1/3

- 1 Unrecognized segment ID
- 2 Unexpected segment
- 3 Mandatory segment missing
- 4 Loop Occurs Over Maximum Times
- 5 Segment Exceeds Maximum Use
- 6 Segment Not in Defined Transaction Set
- 7 Segment Not in Proper Sequence

Segment: **AK4** Data Element Note
Position: 050
Loop: AK3 Optional
Level:
Usage: Optional
Max Use: 99
Purpose: To report errors in a data element or composite data structure and identify the location of the data element

RI Use: **Optional**
Example: AK4*\

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	AK401	C030	Position in Segment	M
			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	
Must Use	C03001	722	Element Position in Segment	M N0 1/2
			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	
	C03002	1528	Component Data Element Position in Composite	O N0 1/2
			To identify the component data element position within the composite that is in error	
	AK402	725	Data Element Reference Number	O N0 1/4
			Reference number used to locate the data element in the Data Element Dictionary	
Must Use	AK403	723	Data Element Syntax Error Code	M ID 1/3
			Code indicating the error found after syntax edits of a data element	
			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	
			10 Exclusion Condition Violated	
	AK404	724	Copy of Bad Data Element	O AN 1/99
			This is a copy of the data element in error	

Segment: **AK5** Transaction Set Response Trailer
Position: 060
Loop: AK2 Optional
Level:
Usage: Mandatory
Max Use: 1
Purpose: To acknowledge acceptance or rejection and report errors in a transaction set

RI Use: Required
Example: AK5*E*5\

Data Element Summary

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	AK501	717 Transaction Set Acknowledgment Code Code indicating accept or reject condition based on the syntax editing of the transaction set A Accepted E Accepted But Errors Were Noted M, R, X Rejected	M ID 1/1
	AK502	718 Transaction Set Syntax Error Code Code indicating error found based on the syntax editing of a transaction set 1 Transaction Set Not Supported 2 Transaction Set Trailer Missing 3 Transaction Set Control Number in Header & Trailer So 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 7 Missing or Invalid Transaction set Control Number 8 Authentication Key Name Unknown 9 Encryption Key Name Unknown 10 Requested Service (Authentication or Encrypted) Not Available 11 Unknown Security Recipient 12 Incorrect Message Length (Encryption Only) 13 Message Authentication Code Failed 15 Unknown Security Originator 16 Syntax Error in Decrypted Text 17 Security Not Supported 19 S1E Security End Segment Missing for S1S Security Start Segment 20 S1S Security Start Segment Missing for S1E Security End Segment 21 S3E Security End Segment Missing for S2S Security Start Segment 22 S2S Security Start Segment Missing for S2E Security End Segment 23 Transaction Set Control Number Not Unique within the Functional Group	O ID 1/3
	AK503	718 Transaction Set Syntax Error Code Code indicating error found based on the syntax editing of a transaction set	O ID 1/3
	AK504	718 Transaction Set Syntax Error Code Code indicating error found based on the syntax editing of a transaction set	O ID 1/3
	AK505	718 Transaction Set Syntax Error Code	O ID 1/3

AK506 **718**

Code indicating error found based on the syntax editing of a transaction set

Transaction Set Syntax Error Code

O ID 1/3

Code indicating error found based on the syntax editing of a transaction set

Segment: **AK9** Functional Group Response Trailer
Position: 070
Loop:
Level:
Usage: Mandatory
Max Use: 1
Purpose: 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
Comments: **If AK901 contains the value "A" or "E", then the transmitted functional group is accepted. If AK901 contains the value "R", then the transmitted group is rejected.**

RI Use: Required
Example: AK9*E*000017*000017*000017\

Data Element Summary

Ref. Des.	Data Element	Name	Attributes																																		
Must Use	AK901	715 Functional Group Acknowledge Code Code indicating accept or reject condition based on the syntax editing of the functional group	M ID 1/1																																		
<table border="1"> <tr><td>A</td><td>Accepted</td></tr> <tr><td>E</td><td>Accepted</td></tr> <tr><td>M</td><td>Rejected</td></tr> <tr><td>P</td><td>Partially Accepted</td></tr> <tr><td>R</td><td>Rejected</td></tr> <tr><td>X</td><td>Rejected</td></tr> </table>				A	Accepted	E	Accepted	M	Rejected	P	Partially Accepted	R	Rejected	X	Rejected																						
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Must Use	AK902	97 Number of Transaction Sets Included 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 Number of Transaction Sets received	M N0 1/6																																		
Must Use	AK904	2 Number of Accepted Transaction Sets Number of accepted Transaction Sets in a Functional Group	M N0 1/6																																		
	AK905	716 Functional Group Syntax Error Code Code indicating error found based on the syntax editing of the functional group header and/or trailer	O ID 1/3																																		
<table border="1"> <tr><td>1</td><td>Functional Group Not Supported</td></tr> <tr><td>2</td><td>Functional Group Version Not Supported</td></tr> <tr><td>3</td><td>Functional Group Trailer Missing</td></tr> <tr><td>4</td><td>Group Control Number in the Functional Group header and Trailer</td></tr> <tr><td>5</td><td>Number of Included Transaction Sets Does Not Match Actual Count</td></tr> <tr><td>6</td><td>Group Control Number Violates Syntax</td></tr> <tr><td>10</td><td>Authentication Key Name Unknown</td></tr> <tr><td>11</td><td>Encryption Key Name Unknown</td></tr> <tr><td>12</td><td>Requested Service (Authentication or Encryption) Not Available</td></tr> <tr><td>13</td><td>Unknown Security Recipient</td></tr> <tr><td>14</td><td>Unknown Security Originator</td></tr> <tr><td>15</td><td>Syntax Error in Decrypted Text</td></tr> <tr><td>16</td><td>Security Not Supported</td></tr> <tr><td>17</td><td>Incorrect Message Length (Encryption Only)</td></tr> <tr><td>18</td><td>Message Authentication Code Failed</td></tr> <tr><td>19</td><td>S1E Security End Segment Missing for S1S Security Start Segment</td></tr> <tr><td>20</td><td>S1E Security End Segment Missing for S2S Security Start Segment</td></tr> </table>				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	5	Number of Included Transaction Sets Does Not Match Actual Count	6	Group Control Number Violates Syntax	10	Authentication Key Name Unknown	11	Encryption Key Name Unknown	12	Requested Service (Authentication or Encryption) Not Available	13	Unknown Security Recipient	14	Unknown Security Originator	15	Syntax Error in Decrypted Text	16	Security Not Supported	17	Incorrect Message Length (Encryption Only)	18	Message Authentication Code Failed	19	S1E Security End Segment Missing for S1S Security Start Segment	20	S1E Security End Segment Missing for S2S Security Start Segment
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AK906	716	Functional Group Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of the functional group header and/or trailer	
AK907	716	Functional Group Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of the functional group header and/or trailer	
AK908	716	Functional Group Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of the functional group header and/or trailer	
AK909	716	Functional Group Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of the functional group header and/or trailer	

Segment: **SE** Transaction Set Trailer
Position: 080
Loop:
Level:
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

RI Use: Required
Example: SE*000000022*000000001\

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments 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 Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set Must match the same unique number assigned in the ST segment in data element ST02.	M AN 4/9