International Truck and Engine Corporation

EDI 997 - Functional Acknowledgement

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997 Functional Acknowledgment

Functional Group=FA

This standard provides the format and establishes the data contents of a functional acknowledgment transaction set. The purpose of this standard is 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.

Heading:

<u>Pos</u>	<u>Id</u>	Segment Name	<u>Req</u>	Max Use	Repeat	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1		N1/010	Used
020	AK1	Functional Group Response Header	M	1		N1/020	Used
LOOP ID - AK2				<u>999999</u>			
030	AK2	Transaction Set Response Header	O	1		N1/030	Used
LOOP II) - AK3				<u>999999</u>		
040	AK3	Data Segment Note	O	1			Used
050	AK4	Data Element Note	O	99			Used
060	AK5	Transaction Set Response Trailer	M	1			Used
070	AK9	Functional Group Response Trailer	M	1			Used
080	SE	Transaction Set Trailer	M	1			Used

Notes:

1/010 These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments.

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 acknowledgment for a functional group. There shall be one AK1 segment for each functional group that is being acknowledged.

AK2 is used to start the acknowledgment 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.

ST Transaction Set Header

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

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

Element Summary:

<u>Ref</u>	<u>Id</u>		Element Name	Req	Type	Min/Max	Usage
ST01	143	Transaction S	Set Identifier Code	M	ID	3/3	Used
		Description:	Code uniquely identifying a Transaction Set.				
		<u>Code</u> 997	Name X12.20 Functional Acknowledgment	-			
ST02	329	Transaction S	Set Control Number	M	AN	4/9	Used
		Description: originator for	Identifying control number assigned by the a transaction set.				

Comments:

1. The transaction set identifier (ST01) is intended for use by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the invoice transaction set).

Trading Partner:

Example:

ST*997*0001 n/l

AK1 Functional Group Response Header

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

To start acknowledgment of a functional group.

Element Summary:

<u>Ref</u>	<u>Id</u>	Element Name	<u>Req</u>	Type	Min/Max	<u>Usage</u>
AK101	479	Functional Identifier Code	M	ID	2/2	Used
		Description: Code identifying a group of application related Transaction Sets.				
		Trading Partner: This value must match the functional group identifier GS01 of the group being acknowledged.				
AK102	28	Group Control Number	M	N0	1/9	Used
		Description: Assigned number originated and maintained by the sender.				

Comments:

1. AK102 is the data interchange control number found in the GS segment in the functional group being acknowledged.

Trading Partner:

Example:

AK1*PS*12345 n/l

AK2 Transaction Set Response Header

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

To start acknowledgment of a single transaction set.

Element Summary:

<u>Ref</u>	<u>Id</u>	Element Name	Req	<u>Type</u>	Min/Max	<u>Usage</u>
AK201	143	Transaction Set Identifier Code	M	ID	3/3	Used
		Description: Code uniquely identifying a Transaction Set.				
		Trading Partner: Must match value in ST01 of transaction being acknowledged.				
AK202	329	Transaction Set Control Number Description: Identifying control number assigned by the originator for a transaction set.	M	AN	4/9	Used

Comments:

1. AK202 is the transaction set control number found in the ST segment in the transaction set being acknowledged.

Trading Partner:

Example:

AK2*830*0002 n/l

AK3 Data Segment Note

Pos: 040 Max: 1 Heading - Optional Loop: AK3 Elements: 8

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

Element Summary:

<u>Ref</u>	<u>Id</u>	Element Name	Req	<u>Type</u>	Min/Max	<u>Usage</u>
AK301	721	Segment ID Code	M	ID	2/3	Used
		Description: Code defining the segment ID of the data segment error. See Segment Directory.	in			
AK302	719	Segment Position in Transaction Set	M	N0	1/6	Used
		Description: The numerical count position of this data segment from the start of the transaction set: the transaction set header is count position 1.				
AK303	447	Loop Identifier Code	o	ID	1/4	Used
		Description: Code identifying a loop within the transaction set which is bounded by the related LS and LE segments (corresponding LS and LE segments must have the same value for loop identifier). (Note: The loop ID number given on the transaction set diagram is recommended as the value for this data element in segments LS and LE.)				
AK304	720	Segment Syntax Error Code	o	ID	1/3	Used
		Description: Code indicating error found based on the syntax editing of a segment				
		Code Name				
		1 Unrecognized segment ID				
		Unexpected segmentMandatory 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				
A 17205	720	,	0	ID	1/2	TIJ
AK305	720	Segment Syntax Error Code Description: Code indicating error found based on the syntax	О	ID	1/3	Used
		Description: Code indicating error found based on the syntax editing of a segment				
		Code Name				
		1 Unrecognized segment ID				
		2 Unexpected segment				
		 Mandatory segment missing Loop Occurs Over Maximum Times 				
		5 Segment Exceeds Maximum Use				
		6 Segment Not in Defined Transaction Set				
		7 Segment Not in Proper Sequence				
AK306	720	Segment Syntax Error Code	O	ID	1/3	Used
		Description: Code indicating error found based on the syntax editing of a segment				
		Code Name				
		1 Unrecognized segment ID 2 Unexpected segment				

Ref	<u>Id</u>		Element Name	Req	<u>Type</u>	Min/Max	Usage
AK307	720	Code 3 4 5 6 7 Segment Synt Description: editing of a se	Name Mandatory segment missing Loop Occurs Over Maximum Times Segment Exceeds Maximum Use Segment Not in Defined Transaction Set Segment Not in Proper Sequence ax Error Code Code indicating error found based on the syntax gment	0	ID	1/3	Used
		Code 1 2 3 4 5 6 7	Name Unrecognized segment ID Unexpected segment Mandatory segment missing Loop Occurs Over Maximum Times Segment Exceeds Maximum Use Segment Not in Defined Transaction Set Segment Not in Proper Sequence				
AK308	720	Segment Synt Description: editing of a seg Code 1 2 3 4 5 6 7	ax Error Code Code indicating error found based on the syntax	O	ID	1/3	Used

Trading Partner: Example: AK3*FST*10**2 n/l

AK4 Data Element Note

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

To report errors in a data element and to identify the location of the data element.

Element Summary:

Ref	<u>Id</u>		Element Name	Req	<u>Type</u>	Min/Max	<u>Usage</u>
AK401	722	Element Posit	ion in Segment	M	N0	1/2	Used
		for the data el	This is used to indicate the relative position of the n error in this data segment. The count starts with 1 ement immediately following the segment ID. This an error in the segment ID.				
AK402	725	Data Element	Reference Number	O	N0	1/4	Used
		Description: Dictionary.	Reference number used to locate the Data Element				
AK403	723	Data Element	Syntax Error Code	M	ID	1/3	Used
		Description: a data element	Code indicating the error found after syntax edits o t.	f			
		Code 1 2 3 4 5 6 7 8 9	Name Mandatory data element missing Conditional required data element missing. Too many data elements. Data element too short. Data element too long. Invalid character in data element. Invalid code value. Invalid Date Invalid Time				
AK404	724	Copy of Bad I	Data Element	O	AN	1/99	Used
		Description:	This is a copy of the data element in error.				

Trading Partner:

Example:

AK4*2*680*1 n/l

AK5 Transaction Set Response Trailer

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

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

Element Summary:

<u>Ref</u>	<u>Id</u>		Element Name	Req	Type	Min/Max	<u>Usage</u>
AK501	717	Description:	et Acknowledgment Code Code indicating accept or reject condition based or ing of the transaction set.	M n	ID	1/1	Used
		<u>Code</u> A E R	Name Accepted Accepted But Errors Were Noted Rejected				
AK502	718	Transaction S	et Syntax Error Code	O	ID	1/3	Used
		Description: Code indicating error found based on the syntax editing of a transaction set.					
		Code 1 2 3 4 5 6 7	Name Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual Count One or More Segments in Error Missing or Invalid Transaction Set Identifier Missing or Invalid Transaction Set Control Number				
AK503	718	Transaction S	et Syntax Error Code	o	ID	1/3	Used
		Description: editing of a tra	Code indicating error found based on the syntax				
		Code 1 2 3 4 5 6 7	Name Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual Count One or More Segments in Error Missing or Invalid Transaction Set Identifier Missing or Invalid Transaction Set Control Number				
AK504	718		et Syntax Error Code	O	ID	1/3	Used
		Description: editing of a tra	Code indicating error found based on the syntax nsaction set.				
		Code 1 2 3	Name Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual Count				

Ref	<u>Id</u>		Element Name	Req	<u>Type</u>	Min/Max	Usage
		<u>Code</u> 5 6 7	Name One or More Segments in Error Missing or Invalid Transaction Set Identifier Missing or Invalid Transaction Set Control Number				
AK505	718	Transaction S	et Syntax Error Code	O	ID	1/3	Used
		Description: editing of a tra	Code indicating error found based on the syntax nsaction set.				
		Code 1 2 3 4 5 6 7	Name Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual Count One or More Segments in Error Missing or Invalid Transaction Set Identifier Missing or Invalid Transaction Set Control Number				
AK506	718	Transaction S Description: editing of a tra	Set Syntax Error Code Code indicating error found based on the syntax insaction set.	0	ID	1/3	Used
		Code	Name				
		1 2 3 4 5 6 7	Transaction Set Not Supported Transaction Set Trailer Missing Transaction Set Control Number in Header and Trailer Do Not Match Number of Included Segments Does Not Match Actual Count One or More Segments in Error Missing or Invalid Transaction Set Identifier Missing or Invalid Transaction Set Control Number				

Trading Partner: Example: AK5*E*2 n/l

AK9 Functional Group Response Trailer

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

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:

Ref	<u>Id</u>		Element Name	Req	<u>Type</u>	Min/Max	<u>Usage</u>
AK901	715	Functional Group Acknowledge Code		M	ID	1/1	Used
		Description: the syntax edit	Code indicating accept or reject condition based on ing of the functional group.	l			
		<u>Code</u>	Name				
		A	Accepted				
		E P	Accepted, but errors were noted. Partially Accepted, at least on transaction set was rejected.				
		R	Rejected				
AK902	97	Number of Tr	ansaction Sets Included	M	N0	1/6	Used
			Total number of transaction sets included in the up or interchange (transmission) group terminated by taining this data element.				
AK903	123	Number of Re	eceived Transaction Sets	M	N0	1/6	Used
		Description:	Number of Transaction Sets received.				
AK904	2	Number of Ac	ecepted Transaction Sets	M	N0	1/6	Used
		Description: Group.	Number of accepted Transaction Sets in a Function	al			
AK905	716	Functional Gr	coup Syntax Error Code	O	ID	1/3	Used
		Description: editing of the f	Code indicating error found based on the syntax functional group header and/or trailer.				
		Code	Name				
		1	Functional Group Not Supported				
		2 3	Functional Group Version Not Supported Functional Group Trailer Missing				
		4	Data Interchange Control Number in the				
		•	Functional Group Header and Trailer Do Not				
		-	Agree				
		5	Number of Included Transaction Sets Does Not Match Actual Count				
AK906	716	Functional Gr	oup Syntax Error Code	o	ID	1/3	Used
		Description: editing of the f	Code indicating error found based on the syntax functional group header and/or trailer.				
		Code	Name				
		1	Functional Group Not Supported				
		2	Functional Group Version Not Supported				
		3 4	Functional Group Trailer Missing Data Interchange Control Number in the				
		4	Functional Group Header and Trailer Do Not Agree				
		5	Number of Included Transaction Sets Does Not				

Ref	<u>Id</u>		Element Name	Req	<u>Type</u>	Min/Max	Usage
		<u>Code</u>	Name Match Actual Count				
AK907	716	Description:	Functional Group Syntax Error Code Description: Code indicating error found based on the syntax editing of the functional group header and/or trailer.			1/3	Used
		Code 1 2 3 4	Name Functional Group Not Supported Functional Group Version Not Supported Functional Group Trailer Missing Data Interchange Control Number in the Functional Group Header and Trailer Do Not Agree Number of Included Transaction Sets Does Not Match Actual Count				
AK908	716		roup Syntax Error Code	O	ID	1/3	Used
		Description: editing of the f	Code indicating error found based on the syntax functional group header and/or trailer.				
		Code 1 2 3 4	Name Functional Group Not Supported Functional Group Version Not Supported Functional Group Trailer Missing Data Interchange Control Number in the Functional Group Header and Trailer Do Not Agree Number of Included Transaction Sets Does Not Match Actual Count				
AK909	716	Functional G	roup Syntax Error Code	O	ID	1/3	Used
		Description: editing of the f	Code indicating error found based on the syntax functional group header and/or trailer.				
		Code 1 2 3 4	Name Functional Group Not Supported Functional Group Version Not Supported Functional Group Trailer Missing Data Interchange Control Number in the Functional Group Header and Trailer Do Not Agree Number of Included Transaction Sets Does Not Match Actual Count				

Comments:

1. If AK901 is 'A' or 'E', then the transmitted functional group is accepted. If AK901 is 'R', then the transmitted group is rejected.

Trading Partner:

Example:

AK9*A*1*1*1 n/l

SE Transaction Set Trailer

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

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>	Element Name	Req	Type	Min/Max	<u>Usage</u>
SE01	96	Number of Included Segments	\mathbf{M}	N0	1/6	Used
		Description: Total number of segments included in a transaction set including ST and SE segments.	n			
SE02	329	Transaction Set Control Number	M	AN	4/9	Used
		Description: Identifying control number assigned by the originator for a transaction set.				

Comments:

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

Trading Partner:

Example:

SE*6*0001 n/l



International Truck and Engine Corporation

APPENDIX of EXAMPLES

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NOTE: This document is to be used in conjunction with the International 997 Implementation Guideline to illustrate examples and functional definition of this transaction set.

Example I: Functional Acknowledgement (997)

This example shows the looping structure for a Functional Acknowledgement which is partially accepting the transactions within a functional group..

EDI DATA ELEMENTS ST*997*0001 n/l	INTERPRETATION Transaction Set ID code is 997 (Functional Acknowledgement); Transaction Control Number is 0001.
AK1*SH*493 n/l	Functional ID Code of Transaction being acknowledged is SH (Ship Notice/Manifest); GS Control Number of acknowledged transaction was 493.
AK2*856*0491 n/l	Transaction Set ID of acknowledged transaction is 856; ST Control Number is 0491.
AK3*CLD*29 n/l	The Segment containing the error was CLD; the CLD was the twenty-ninth segment in the transaction.
AK4*1**1 n/l	The first data element in the segment is mandatory, and it is missing.
AK5*R*5 n/l	The transmitted transaction was rejected, because one or more segments were in error.
AK2*856*0492 n/l	Transaction Set ID of acknowledged transaction is 856; ST Control Number is 0492.
AK5*A n/l	The transmitted transaction is accepted.
AK9*P*2*2*1 n/l	Part of the transmitted functional group was accepted; Number of included transactions sets was 2; Number received transaction sets was 2; Number of accepted transaction sets was 1
SE*10*0001 n/l	Number of included segments is 10; Transaction Control Number is 0001.

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