



Electronic Data Interchange

997 v.4010

Implementation Packet
(Guide and Related Documents)

Version 1.0
June 4, 1999

Copyright 1998, 1999 by: Pacific Gas & Electric Company
77 Beale Street
San Francisco, CA 94177

All rights reserved. No part of this document may be reproduced or copied in any form or by any means -- graphic, electronic, or mechanical, including photocopying, recording, taping, or information and retrieval systems -- without the prior written consent of Pacific Gas & Electric Co.

997 Functional Acknowledgment

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.

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
5	010	ST	Transaction Set Header	M	1		n1
6	020	AK1	Functional Group Response Header	M	1		n2
LOOP ID - AK2						999999	
7	030	AK2	Transaction Set Response Header	O	1		n3
LOOP ID - AK3						999999	
8	040	AK3	Data Segment Note	O	1		c1
9	050	AK4	Data Element Note	O	99		
10	060	AK5	Transaction Set Response Trailer	M	1		
11	070	AK9	Functional Group Response Trailer	M	1		
12	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

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

Data Element Summary

Ref.	Data Element	Name	Attributes
>>	ST01	143 Transaction Set Identifier Code	M ID 3/3
		Code uniquely identifying a Transaction Set	
		Refer to 004010 Data Element Dictionary for acceptable code values.	
>>	ST02	329 Transaction Set Control Number	M AN 4/9
		Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

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

- 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.

Comments:

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>>	AK101	479 Functional Identifier Code Code identifying a group of application related transaction sets Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 2/2
>>	AK102	28 Group Control Number Assigned number originated and maintained by the sender	M N0 1/9

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
Syntax Notes:
Semantic Notes:

- 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.

Comments:

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>>	AK201	143 Transaction Set Identifier Code Code uniquely identifying a Transaction Set Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 3/3
>>	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
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>> 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
>> 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 Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/3

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

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

Comments:

Data Element Summary

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>> 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	
>> 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	
>> AK403	723	Data Element Syntax Error Code	M ID 1/3
		Code indicating the error found after syntax edits of a data element Refer to 004010 Data Element Dictionary for acceptable code values.	
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
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

Ref.	Data Element	Name	Attributes
>>	AK501	717 Transaction Set Acknowledgment Code	M ID 1/1
		Code indicating accept or reject condition based on the syntax editing of the transaction set Refer to 004010 Data Element Dictionary for acceptable code values.	
	AK502	718 Transaction Set Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of a transaction set Refer to 004010 Data Element Dictionary for acceptable code values.	
	AK503	718 Transaction Set Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of a transaction set Refer to 004010 Data Element Dictionary for acceptable code values.	
	AK504	718 Transaction Set Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of a transaction set Refer to 004010 Data Element Dictionary for acceptable code values.	
	AK505	718 Transaction Set Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of a transaction set Refer to 004010 Data Element Dictionary for acceptable code values.	
	AK506	718 Transaction Set Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of a transaction set Refer to 004010 Data Element Dictionary for acceptable code values.	

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

Syntax Notes:
Semantic Notes:

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

Data Element Summary

Ref.	Data Element	Name	Attributes
>> AK901	715	Functional Group Acknowledge Code Code indicating accept or reject condition based on the syntax editing of the functional group Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 1/1
>> 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
>> AK903	123	Number of Received Transaction Sets Number of Transaction Sets received	M N0 1/6
>> 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 Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/3
AK906	716	Functional Group Syntax Error Code Code indicating error found based on the syntax editing of the functional group header and/or trailer Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/3
AK907	716	Functional Group Syntax Error Code Code indicating error found based on the syntax editing of the functional group header and/or trailer Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/3
AK908	716	Functional Group Syntax Error Code Code indicating error found based on the syntax editing of the functional group header and/or trailer Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/3
AK909	716	Functional Group Syntax Error Code Code indicating error found based on the syntax editing of the functional group header and/or trailer Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/3

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)

Syntax Notes:
Semantic Notes:

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

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
>>	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
>>	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	