GENERAL MOTORS

EDIFACT IMPLEMENTATION GUIDELINES

FOR

APERAK MESSAGE

APPLICATION ERROR & ACKNOWLEDGEMENT MESSAGE

D97A

Version 1.1

General Motors Customer Care & Aftersales (CCA)

EDIFACT IMPLEMENTATION GUIDELINES

Table of Contents

EDIFACT IMPLEMENTATION GUIDELINES

INTRODUCTION:

This Implementation Guideline details how General Motors intends to use the enhanced APERAK Message. It provides the standardized format and establishes the data content of an Application Error and Acknowledgement Message. The APERAK is a message from GM to a GM Supplier and will contain error details in response to an invalid DESADV message.

DEFINITION AND DESCRIPTION:

This document provides the definition of an APERAK Message, based on the EDIFACT APERAK D97.A, to be used in Electronic Data Interchange (EDI) between GM and its Trading Partners.

This documentation is fully comprehensive and allows the implementation of the EDIFACT APERAK without the necessity for any additional standard related documentation.

FUNCTIONAL DEFINITION:

The APERAK is a message from GM to a GM Supplier providing error details in response to an invalid DESADV message.

REFERENCES:

This document provides the specific description of the EDIFACT APERAK message and has been developed based on version D97A of the EDIFACT Standard.

RESPONSIBILITY:

This document was developed and is maintained by the General Motors Global EDI Group. It is distributed internally to all General Motors EDI Coordinators and Partners.

MAINTENANCE:

The General Motors Global EDI Group will review changes to this document, as needed. The change process can only be initiated by individuals/organizations within the General Motors Corporation. Changes to this guideline will be considered on an annual basis, to ensure that there is a consistent interpretation of the message.

HOW TO READ THIS DOCUMENTATION:

All segments in the subset used by General Motors are described in the following pages. The segment description is to be read as follows:

1 **Segment: BGM Beginning of Message**

2 **Position:** 0020
Group:
Level: 0
3 **Usage:** Mandatory
Max Use: 1
4 **Purpose:** A segment indicating the beginning of a message and identifying the consignment for which status is being reported.
5 **Notes:** ***Example:***
BGM+23+751615766000+9'

6 **Data Element Summary**

	7 Data Element	Component Element	Name	Attributes		8
M	**C002**		**DOCUMENT/MESSAGE NAME**	**M**	**1**	
			Identification of a type of document/message by code or name. Code preferred.			
M		**1001**	**Document name code**	**M**		**an..3**
			Code specifying the document name.			
			23 Status information			
		1000	**Document name**	**C**		**an..35**
			Free form description of the document.			
M	**C106**		**DOCUMENT/MESSAGE IDENTIFICATION**	**M**	**1**	
			Identification of a document/message by its number and eventually its version or revision.			
	9		**External Notes:**			
			Sender internal message reference number			
M		**1004**	**Document/message number**	**O**		**an..35**
			Reference number assigned to the document/message by the issuer.			
			External Notes:			
			May be the same as UNH.10, or any internal number.			
M	**1225**		**MESSAGE FUNCTION CODE**	**M**	**1**	**an..3**
			Code indicating the function of the message.			
			9 Original			

Legend

1. Segment position in the message structure, segment tag and segment name
2. Identification of the segment group and position within the message
3. Status of the segment, as defined by EDIFACT and GM
4. Description of the function of the segment, as defined by EDIFACT and GM
5. Example of segment as it may appear in an interchange.
6. The Data Element Summary identifies the data elements and details within the segment.
   7. Data element tag – data elements with a ‘C’ denote a Composite Data Element
   8. The Attributes column contain field requirement status, repeat count, data type, and field length
   9. Highlighted lines contain remarks specific to General Motors’ use of the Data Element

MESSAGE STRUCTURE:

The message structure below illustrates how the segments may be used in the APERAK message to accommodate the requirements identified by General Motors:

UNH Message header	×1 (M)
BGM Beginning of message	×1 (M)
DTM Date/time/period	×9 (C)
FTX Free Text	×9 (C)
Segment Group 1	×9 (C)
RFF Reference	×1 (M)
Segment Group 2	×9 (C)
NAD Name and address	×1 (M)
Segment Group 3	×99999 (C)
ERC Application Error Information	×1 (M)
Segment Group 4	×1 (C)
RFF Reference	×1 (M)
FTX Free Text	×9(C)
UNT Message trailer	×1 (M)

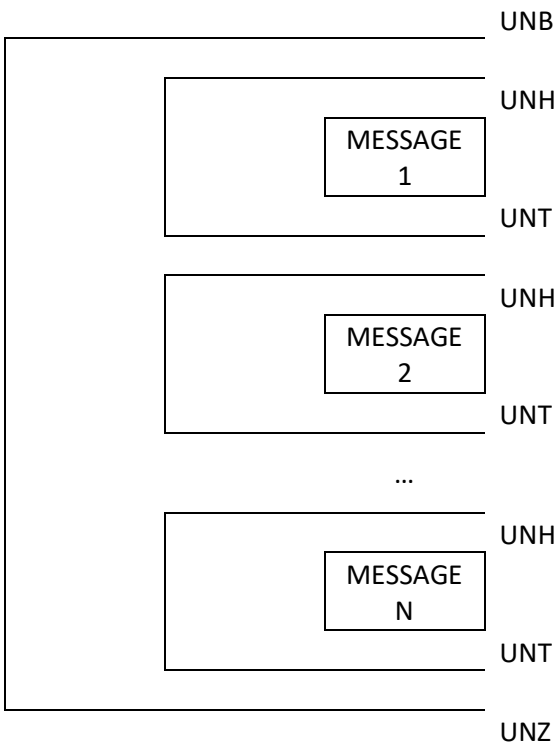
SERVICE SEGMENTS DESCRIPTION:

The following segments are as defined by EDIFACT.

The UNB, UNH, UNT, and UNZ segments are the envelope of any message, enclosing all the data that is being transmitted.

The UNB (Interchange Header) and UNZ (Interchange Trailer) segments mark respectively the beginning and the end of an interchange thereby providing a unique interchange control reference.

Within the interchange, the UNH (Message Header) and UNT (Message Trailer) segments uniquely begin and end the various messages contained in an interchange.



APERAK Application Error and Acknowledgement Message

Introduction:

The function of this message is: a) to inform a message issuer that his message has been received by the addressee's application and has been rejected due to errors encountered during its processing in the application. b) to acknowledge to a message issuer the receipt of his message by the addressee's application.

Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Group Repeat	Notes and Comments
0005	UNB	Interchange Header	C	1		
0010	UNH	Message Header	M	1		
0020	BGM	Beginning of Message	M	1		
0030	DTM	Date/Time/Period	C	9		
0040	FTX	Free Text	C	9		
0060		Segment Group 1: RFF	C		9	
0070	RFF	Reference	M	1		
0090		Segment Group 2: NAD	C		9	
0100	NAD	Name and Address	M	1		
0130		Segment Group 3: ERC-SG4	C		99999	
0140	ERC	Application Error Information	M	1		
0160		Segment Group 4: RFF-FTX	C		1	
0170	RFF	Reference	M	1		
0180	FTX	Free Text	C	9		
0190	UNT	Message Trailer	M	1		

Segment: **UNB** **Interchange Header**
Position: 0005
Group:
Level: 0
Usage: Conditional (Optional)
Max Use: 1
Purpose: To start, identify and specify an interchange
Notes: ***Example:***
UNB+UNOA:2+PAF:ZZ+5BD:ZZ+240628:1001+5696++GMAPERAK'

Data Element Summary

Data Attributes Element	Component Element	Name	Req	Des/Repr
S001		**SYNTAX IDENTIFIER**	**M**	
		Identification of the agency controlling the syntax and indication of syntax level.		
	0001	**Syntax identifier**	**M**	**a4**
		Coded identification of the agency controlling a syntax and syntax level used in an interchange.		
		UNOA UN/ECE level A		
	0002	**Syntax version number**	**M**	**n1**
		Version number of the syntax identified in the syntax identifier (0001).		
		2 Version 2		
S002		**INTERCHANGE SENDER**	**M**	
		Identification of the sender of the interchange.		
	0004	**Sender identification**	**M**	**an..35**
		Name or coded representation of the sender of a data interchange.		
	0007	**Partner identification code qualifier**	**C**	**an..4**
		Qualifier referring to the source of codes for the identifiers of interchanging partners.		
		ZZ Mutually defined		
S003		**INTERCHANGE RECIPIENT**	**M**	
		Identification of the recipient of the interchange.		
	0010	**Recipient identification**	**M**	**an..35**
		Name or coded representation of the recipient of a data interchange.		
	0007	**Partner identification code qualifier**	**C**	**an..4**
		Qualifier referring to the source of codes for the identifiers of interchanging partners.		
		ZZ Mutually defined		
S004		**DATE AND TIME OF PREPARATION**	**M**	
		Date and time of preparation of the interchange.		
	0017	**Date of preparation**	**M**	**n6**
		Local date when an interchange or a functional group was prepared.		
	0019	**Time of preparation**	**M**	**n4**
		Local time of day when an interchange or a functional group was prepared.		
0020		**INTERCHANGE CONTROL REFERENCE**	**M**	**an..14**
		Unique reference assigned by the sender to an interchange.		
0026		**APPLICATION REFERENCE**	**C**	**an..14**
		Identification of the application area assigned by the sender, to which the messages in the interchange relate e.g. the message identifier if all the messages in the interchange are of the same type.		

Segment: **UNH** **Message Header**
Position: 0010
Group:
Level: 0
Usage: Mandatory
Max Use: 1
Purpose: A service segment starting and uniquely identifying a message. The message type code for the Application error and acknowledgement message is APERAK.
Note: Application error and acknowledgement messages conforming to this document must contain the following data in segment UNH, composite S009:
Data element 0065 APERAK 0052 D 0054 97A 0051 UN
Notes: ***Example:***
UNH+56960001+APERAK:D:97A:UN'

Data Element Summary

Data Element	Component Element	Name	Req	Des/Repr
0062		**MESSAGE REFERENCE NUMBER**	**M**	**an..14**
		Unique message reference assigned by the sender.		
		Must match the message reference number in the UNT.		
S009		**MESSAGE IDENTIFIER**	**M**	
		Identification of the type, version etc. of the message being interchanged.		
	0065	**Message type identifier**	**M**	**an..6**
		Code identifying a type of message and assigned by its controlling agency.		
		APERAK Application error and acknowledgement message		
	0052	**Message type version number**	**M**	**an..3**
		Version number of a message type.		
		D Draft version/UN/EDIFACT Directory		
	0054	**Message type release number**	**M**	**an..3**
		Release number within the current message type version number (0052).		
		97A Release 1997 - A		
	0051	**Controlling agency**	**M**	**an..2**
		Code identifying the agency controlling the specification, maintenance and publication of the message type.		
		UN UN/ECE/TRADE/WP.4		

Segment: **BGM** **Beginning of Message**
Position: 0020
Group:
Level: 0
Usage: Mandatory
Max Use: 1
Purpose: A segment to indicate the type and function of the message and to transmit the identifying number.
Notes: ***Example:***
BGM+7+9024038107+9+CA'

Data Element Summary

Data Attributes Element	Component Element	Name	Req	Des/Repr
C002		**DOCUMENT/MESSAGE NAME**	**C**	
		Identification of a type of document/message by code or name. Code preferred.		
	1001	**Document/message name, coded**	**C**	**an..3**
		Document/message identifier expressed in code.		
		7 Process data report		
C106		**DOCUMENT/MESSAGE IDENTIFICATION**	**C**	
		Identification of a document/message by its number and eventually its version or revision.		
	1004	**Document/message number**	**C**	**an..35**
		Reference number assigned to the document/message by the issuer.		
		Reference identification number unique for a calendar year.		
1225		**MESSAGE FUNCTION, CODED**	**C**	**an..3**
		Code indicating the function of the message.		
		9 Original		
4343		**RESPONSE TYPE, CODED**	**C**	**an..3**
		Code specifying the type of acknowledgment required or transmitted.		
		CA Conditionally accepted		
		RE Rejected		

Segment: **DTM** **Date/Time/Period**
Position: 0030
Group:
Level: 1
Usage: Conditional (Optional)
Max Use: 9
Purpose: A segment to specify related date/time.
Notes: ***Example:***
DTM+137:202406281001:203'

Data Element Summary

Data Attributes Element	Component Element	Name	Req	Des/Repr
C507		**DATE/TIME/PERIOD**	**M**	
		Date and/or time, or period relevant to the specified date/time/period type.		
	2005	**Date/time/period qualifier**	**M**	**an..3**
		Code giving specific meaning to a date, time or period.		
		137 Document/message date/time		
	2380	**Date/time/period**	**C**	**an..35**
		The value of a date, a date and time, a time or of a period in a specified representation.		
	2379	**Date/time/period format qualifier**	**C**	**an..3**
		Specification of the representation of a date, a date and time or of a period.		
		203 CCYYMMDDHHMM		

Segment: **FTX** **Free Text**
Position: 0040
Group:
Level: 1
Usage: Conditional (Optional)
Max Use: 9
Purpose: A segment to specify free form or processable supplementary information related to the whole message. In computer-to-computer exchanges free form text will normally require the receiver to process this segment manually.
Notes: ***This segment will be used only once, to indicate the UN/EDIFACT EDI message to which the APERAK is responding.***

Example:
FTX+AAP++DESADV'

Data Element Summary

Data Attributes Element	Component Element	Name	Req	Des/Repr
4451		**TEXT SUBJECT QUALIFIER**	**M**	**an..3**
		Code specifying subject of a free text.		
		AAP Response (free text)		
C107		**TEXT REFERENCE**	**C**	
		Coded reference to a standard text and its source.		
	4441	**Free text identification**	**M**	**an..17**
		Free text in coded form.		
		Actual message name to which response is generated.		

Group: **RFF** **Segment Group 1: Reference**
Position: 0060
Group:
Level: 1
Usage: Conditional (Optional)
Max Use: 9
Purpose: A group of segments to specify the document/message to which the current message relates, and related date and time.

Segment Summary

Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Group: Repeat
0070	RFF	Reference	M	1	

Segment: **RFF** **Reference**
Position: 0070 (Trigger Segment)
Group: Segment Group 1 (Reference) Conditional (Optional)
Level: 1
Usage: Mandatory
Max Use: 1
Purpose: A segment to indicate the reference number of the document/message.
Notes: ***Example:***
RFF+SI:9024038107'

Data Element Summary

Data Attributes Element	Component Element	Name	Req	Des/Repr
C506		**REFERENCE**	**M**	
		Identification of a reference.		
	1153	**Reference qualifier**	**M**	**an..3**
		Code giving specific meaning to a reference segment or a reference number.		
		SI SID (Shipper's identifying number for shipment)		
	1154	**Reference number**	**C**	**an..35**
		Identification number the nature and function of which can be qualified by an entry in data element 1153 Reference qualifier.		
		This value will contain the SID number transmitted in the DESADV.		

Group: **NAD** **Segment Group 2: Name and Address**
Position: 0090
Group:
Level: 1
Usage: Conditional (Optional)
Max Use: 9
Purpose: A group of segments to specify the identifications of message sender and message receiver with their contacts and communication channels.

Segment Summary

Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Group: Repeat
0100	NAD	Name and Address	M	1	

Segment: **NAD** **Name and Address**
Position: 0100 (Trigger Segment)
Group: Segment Group 2 (Name and Address) Conditional (Optional)
Level: 1
Usage: Mandatory
Max Use: 1
Purpose: A segment to specify the identification of the message issuer and message receiver.
Notes: ***Examples:***
NAD+MR+565563897::16'
NAD+FR+17501::92'

Data Element Summary

Data Attributes Element	Component Element	Name		Req	Des/Repr
3035		**PARTY QUALIFIER**		**M**	**an..3**
		Code giving specific meaning to a party.			
		FR	Message from		
		MR	Message recipient		
C082		**PARTY IDENTIFICATION DETAILS**		**C**	
		Identification of a transaction party by code.			
	3039	**Party id. identification**		**M**	**an..35**
		Code identifying a party involved in a transaction.			
	3055	**Code list responsible agency, coded**		**C**	**an..3**
		Code identifying the agency responsible for a code list.			
		16	DUNS (Dun & Bradstreet)		
		92	Assigned by buyer or buyer's agent		

Group: **ERC** **Segment Group 3: Application Error Information**
Position: 0130
Group:
Level: 1
Usage: Conditional (Optional)
Max Use: 99999
Purpose: A group of segments to identify the application error(s) within a specified received message and to give specific details related to the error type or to precise the type of acknowledgement.

Segment Summary

Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Group: Repeat
0140	ERC	Application Error Information	M	1	
0160		Segment Group 4: Reference	C		1

Segment: **ERC** **Application Error Information**
Position: 0140 (Trigger Segment)
Group: Segment Group 3 (Application Error Information) Conditional (Optional)
Level: 1
Usage: Mandatory
Max Use: 1
Purpose: A segment identifying the type of application error or acknowledgement within the referenced message. In case of an error, the error code may specify the error in detail (e.g. a measurement relating to a piece of equipment is wrong) or as a rough indication (e.g. a measurement is wrong).
Notes: ***Example:***
ERC+024::116'

Data Element Summary

Data Element	Component Element	Name	Req	Des/Repr
C901		**APPLICATION ERROR DETAIL**	**M**	
		Code assigned by the recipient of a message to indicate a data validation error condition.		
	9321	**Application error identification**	**M**	**an..8**
		The code assigned by the receiver of a message to the identification of a data validation error condition.		
		024 - Other Unlisted Reason		
	3055	**Code list responsible agency, coded**	**C**	**an..3**
		Code identifying the agency responsible for a code list.		
		116 US, ANSI ASC X12		

Group: **RFF** **Segment Group 4: Reference**
Position: 0160
Group: Segment Group 3 (Application Error Information) Conditional (Optional)
Level: 2
Usage: Conditional (Optional)
Max Use: 1
Purpose: A group of segments to specify the functional entity reference (e.g. goods item level, equipment level) relating to the specified error; further details can be added to identify the error more precisely.

Segment Summary

Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Group: Repeat
0170	RFF	Reference	M	1	
0180	FTX	Free Text	C	9	

Segment: **RFF** **Reference**
Position: 0170 (Trigger Segment)
Group: Segment Group 4 (Reference) Conditional (Optional)
Level: 2
Usage: Mandatory
Max Use: 1
Purpose: A segment to provide a reference relating to the acknowledgement type or the specified error (e.g. functional entity reference such as equipment level).

Data Element Summary

Data Attributes Element	Component Element	Name	Req	Des/Repr
C506		**REFERENCE**	**M**	
		Identification of a reference.		
	1153	**Reference qualifier**	**M**	**an..3**
		Code giving specific meaning to a reference segment or a reference number.		
		AES Primary reference		
	1154	**Reference number**	**C**	**an..35**
		Identification number the nature and function of which can be qualified by an entry in data element 1153 Reference qualifier.		
		This value will contain the SID number transmitted in the DESADV.		

Segment: **FTX** **Free Text**
Position: 0180
Group: Segment Group 4 (Reference) Conditional (Optional)
Level: 3
Usage: Conditional (Optional)
Max Use: 9
Purpose: A segment to provide additional details relating to the reference, e.g. the content of the wrong data (and its exact place in the message).
Notes: ***GM may send multiple iterations of this segment.***

Examples:
FTX+AAO+++INVALID SCAC CODE'
FTX+ABO+++119'

Data Element Summary

Data Element	Component Element	Name	Req	Des/Repr
4451		**TEXT SUBJECT QUALIFIER**	**M**	**an..3**
		Code specifying subject of a free text.		
		AAO Error description (free text)		
		ABO Discrepancy information		
C108		**TEXT LITERAL**	**C**	
		Free text; one to five lines.		
	4440	**Free text**	**M**	**an..70**
		Free text field available to the message sender for information.		
		When Data Element 4451 = AAO, this value will contain the error message. When Data Element 4451 = ABO, this value will contain a copy of the bad data.		

Segment: **UNT** **Message Trailer**
Position: 0190
Group:
Level: 0
Usage: Mandatory
Max Use: 1
Purpose: A service segment ending a message, giving the total number of segments in the message and the control reference number of the message.
Notes: ***Example:***
UNT+12+56960001'

Data Element Summary

Data Attributes Element	Component Element	Name	Req	Des/Repr
0074		**NUMBER OF SEGMENTS IN A MESSAGE**	**M**	**n..6**
		Control count of number of segments in a message.		
0062		**MESSAGE REFERENCE NUMBER**	**M**	**an..14**
		Unique message reference assigned by the sender.		
		Must match the message reference number in the UNH.		

MESSAGE EXAMPLES:

The following examples are illustrative only and does not necessarily reflect an existing solution. It may never be used as a basis for programming or implementing this message.

GM APERAK Sample Message Structure:

UNB+UNOA:2+PAF:ZZ+5BD:ZZ+240628:1001+5696++GMAPERAK’	Interchange Header
UNH+56960001+APERAK:D:97A:UN’	Message Header
BGM+7+9024038107+9+CA’	Beginning of Message (Reference Number)
DTM+137:202406281001:203’	Document Message Date/Time
FTX+AAP++DESADV’	Free Text - Message Name
RFF+SI:9024038107’	SID number
NAD+MR+565563897::16’	Message Recipient
NAD+FR+17501::92’	Message From
ERC+024::116’	Application Error Information
RFF+AES:9024038107’	Reference - SID Number
FTX+AAO+++INVALID SCAC CODE’	Error Description
FTX+ABO+++119’	Discrepancy Information
UNT+12+56960001’	Message Trailer
UNZ+1+000002191’	

APERAK GUIDELINE CHANGE LOG:

Date	Document Version	Segments Impacted	Detail of Change
2-3-2012	1.0		Version 1.0 published
7-3-24	1.1		Guideline format updated – no change to segments.