

Control Message
Message Implementation Guideline
for the Australian Hardware Industry
(Based on the EANCOM 1997 Guideline using
UN/EDIFACT Directory D.96A)

A Hardware Industry B2B E-Commerce Initiative

Implementation v1.0

April 2003

1. Contacts

This EDI Message Implementation Guidelines (MIG) should be read in conjunction with any appropriate terms and conditions of trade between trading partners in the Hardware Industry.

This EDI MIG is based on EAN International's EANCOM® 1997 Guideline using UN/EDIFACT Directory D.96A. For any information regarding EANCOM® or this MIG, please contact:

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This EDI MIG has been developed as part of the Hardware Industry B2B E-Commerce Project facilitated in 2001/2002 by Tradegate ECA and in 2003 by BizEvolution.

HIWG (Hardware Industry Working Group) members 2001 – 2003 have included the following organisations:

• Bunnings Building Supplies	• Mitre 10 Australia
• Dewalt Industrial Powertool Company	• National Building Suppliers Group (NBSG)
• Floriana	• Orica Consumer Products / Dulux
• James Hardie Asia/Pacific	• SPL Group
• John Danks & Son	• woodlogic, a Carter Holt Harvey business
• Master Plumbers' & Mechanical Services Association of Australia (MPMSAA)	

Input was also received from the three HIWG subgroups for Greenlife, Timber and Plumbing.

2. Disclaimer

Every possible effort has been made to ensure that the information and specifications in this document are correct, however the Hardware Industry work group, Tradegate ECA, BizEvolution and EAN Australia expressly disclaim liability for any errors. In addition, no warranty or representation is made that this document will not require modification due to developments in new business practice, technology, changes, omissions or additions.

3. Change Control

Listed below are the changes that have been applied to the previous version (Pilot v1.1) to create this version; Implementation v1.0 April 2003.

Pos.	Section Modified	Nature of Change/Comments	Source/reason
-	Preamble	Addition of sections, 5 & 7	Requested for education / clarification
-	Section 6	Detail section of message deleted from mandatory table as it is not required to acknowledge below whole interchange level.	Correction
-	Message note	Changed to read that the Control message is "Recommended"	Clarify usage

4. Data Content and Structure

Used to acknowledge and syntactically accept/reject an entire interchange or optionally individual messages within an interchange.

UNH	Message Header
UCI	Interchange response; used to acknowledge and accept/reject the interchange.

Detail Section

UCM

Message response; used to acknowledge and accept/reject specific messages in an interchange

UNT	Message Trailer
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5. Reading this Document

Introduction to UN/EDIFACT terminology:

A UN/EDIFACT (ISO 9735) file is called an “*interchange*”. This is the EDI terminology. The interchange is made up of *segments*, which is also an EDI term equivalent to the term “record”.

An interchange starts with an interchange header segment called “UNB” and terminates with an interchange trailer segment called “UNZ”. Within the UNB – UNZ envelope are the segments that comprise either functional groups (not being used by Hardware) or the electronic EDI business *messages* themselves. Each business message begins with a header “UNH” segment and terminates with a trailer “UNT” segment. In between the message header and trailer are the user segments containing the business data.

Sample below¹:

UNB	(start of interchange)
UNH	(start of first business message)
.....user segments	
UNT	(end of first business message)
UNH	(start of second business message)
.....user segments	
UNT	(end of second business message)
UNZ	(end of interchange)

Segments are made up of one or more data *elements*. Each data element in a segment is separated by a plus (+) symbol. A data element can be made up of *components*, which are separated from each other by a colon (:). Segments are terminated by the apostrophe ('). See data stream examples in sample message and on segments in the MIG.

UN/EDIFACT segments are given a *Base Status*, whilst the segments are given *Base Attributes*.

Base Status/Attributes:

M - Mandatory: this segment/element must always be sent²

C - Conditional: this segment/element may be sent, see User Status/User Attributes (below)

¹ This Message Implementation Guideline (MIG) does not include the specifications for the interchange segments (UNB & UNZ) as typically they are generated automatically and contain the addressing data required to deliver the interchange across the communications medium being used to exchange messages between trading partners. Many users use their EAN company Global Location Number (GLN) for addressing purposes.

² Note that a segment with status “M” may occur in a group with status “C” so if the group is not used, then the segment is not used either. However if the group is used the segment must be used. Similarly with data elements.

This Message Implementation Guideline (MIG):

Only those segments in the standard message to be used in this MIG are specified, any segments not used have been omitted for readability. Within the detailed specification of each segment, all data elements are identified, even if they are not used, as placement of data elements within a segment is critical. The *User Status/Attribute* (see below) will indicate whether a particular segment or element is sent or not.

User Status/Attributes:

- M - Mandatory: Base Status/Attribute is mandatory so user status must also be mandatory
- R - Required: Base Status/Attribute is Conditional, but for this MIG it must always be sent
- D - Dependent: must or may be sent where stated conditions apply
- O - Optional: may be sent, by agreement between parties
- X - Not Used: never sent

Notation:

Wherever possible notes have been inserted into the MIG content (shown as shaded) to clarify how the data is to be used as well as any business rules to follow.

Most segments have a shaded block of notes at the beginning of the segment. Much of this is automatically generated text from the EANCOM superset on which this MIG is based. In some cases there are descriptions of data element or code usage that are not available for usage in this MIG.

As such, please use as your primary reference, the data element specification, which begins in each segment immediately below the heading “Data Element Summary”.

6. Required (Mandatory) Data

The data described below is the minimum required for a syntactically valid message according to this Message Implementation Guideline (MIG).

Trading partners will need to confirm any additionally required fields that may be necessary for trading.

Business descriptor name	Segment
Header	
Interchange Sender and Recipient (of original interchange)	UCI
Acknowledgement code	UCI

7. Sample Message

UNB+UNOA:3+9377770001799:14+937777000180C:14+020622:1336+INT50'	Interchange Header for the Control message itself.
UNH+1234+CONTRL:2:2:UN:EAN002'	Message Header for the Control Message
UCI+INT1+9377770001799:14+9377770001829:14+7'	Echo of data in UNB segment of interchange INT1 being acknowledged as accepted.
UNT+3+1234'	Message Trailer for the Control Message
UNZ+1+INT50'	Interchange Trailer for the Control message.

CONTRL Control message

Notes:

Hardware Industry Control Message, Implementation v1.0 April 2003

Business Rules of the Hardware Industry:

- A CONTROL MESSAGE IS RECOMMENDED TO ACKNOWLEDGE EVERY INTERCHANGE BETWEEN TRADING PARTNERS.

Heading Section:

<u>Page No.</u>	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Base Status</u>	<u>User Status</u>	<u>Max.Use</u>	<u>Group Repeat</u>	<u>Notes and Comments</u>
2	0010	UNH	Message Header	M	M	1		
3	0020	UCI	INTERCHANGE RESPONSE	M	M	1		

Detail Section:

<u>Page No.</u>	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Base Status</u>	<u>User Status</u>	<u>Max.Use</u>	<u>Group Repeat</u>	<u>Notes and Comments</u>
	0040		Segment Group 1	C	O		999999	
5	0050	UCM	MESSAGE RESPONSE	M	M	1		

Summary Section:

<u>Page No.</u>	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Base Status</u>	<u>User Status</u>	<u>Max.Use</u>	<u>Group Repeat</u>	<u>Notes and Comments</u>
6	0100	UNT	Message Trailer	M	M	1		

Segment: **UNH** Message Header
Position: 0010
Group:
Level: 0
Usage: Mandatory
Max Use: 1
Purpose: To head, identify and specify a message.

Data Element Summary

<u>Data Element</u>	<u>Component Element</u>	<u>Name</u>	<u>Base Attributes</u>	<u>User Attributes</u>
0062		MESSAGE REFERENCE NUMBER Senders unique message reference. Sequencenumber of messages in the interchange. DE 0062 in the UNT will have the same value. Generated by the sender.	M an..14	M
S009	0065	MESSAGE IDENTIFIER Message type identifier	M an..6	M
		THIS HAS AN EANCOM RESTRICTED CODE LIST <i>CONTRL Syntax and service report message</i>		
	0052	Message type version number THIS HAS AN EANCOM RESTRICTED CODE LIST <i>2 Version 2</i>	M an..3	M
		THIS HAS AN EANCOM RESTRICTED CODE LIST <i>2 Release 2</i>		
	0054	Message type release number THIS HAS AN EANCOM RESTRICTED CODE LIST <i>2 Release 2</i>	M an..3	M
		THIS HAS AN EANCOM RESTRICTED CODE LIST <i>2 Release 2</i>		
	0051	Controlling agency THIS HAS AN EANCOM RESTRICTED CODE LIST <i>UN UN/ECE/TRADE/WP.4, United Nations Standard Messages (UNSM)</i>	M an..2	M
		THIS HAS AN EANCOM RESTRICTED CODE LIST <i>UN UN/ECE/TRADE/WP.4, United Nations Standard Messages (UNSM)</i>		
0068	S010	Association assigned code THIS HAS AN EANCOM RESTRICTED CODE LIST <i>EAN002 EAN Version Control Number.</i>	C an..6	O
		THIS HAS AN EANCOM RESTRICTED CODE LIST <i>EAN002 EAN Version Control Number.</i>		
S010	0070	COMMON ACCESS REFERENCE	C an..35	X
		STATUS OF THE TRANSFER	C	X
		Sequence message transfer number	M n..2	X
	0073	First/last sequence message transfer indication	C a1	X

Segment: **UCI INTERCHANGE RESPONSE**
Position: 0020
Group:
Level: 0
Usage: Mandatory
Max Use: 1
Purpose:
Notes:

To identify the subject interchange, to indicate the acknowledgement or rejection (action taken) of the UNA, UNB and UNZ segments, and to identify any error related to these segments. Depending on the action code it may also indicate the action taken on the functional groups and messages within that interchange.

Data Element Summary

<u>Data Element</u>	<u>Component Element</u>	<u>Name</u>	<u>Base Attributes</u>	<u>User Attributes</u>
0020		INTERCHANGE CONTROL REFERENCE	M an..14	M
S002		INTERCHANGE SENDER	M	M
	0004	Sender identification	M an..35	M
		EAN Location and EC Number (EAN-13)		
	0007	Partner identification code qualifier	C an..4	O
		<i>14 EAN International</i>		
	0008	Address for reverse routing	C an..14	O
S003		INTERCHANGE RECIPIENT	M	M
	0010	Recipient identification	M an..35	M
		EAN Location and EC Number (EAN-13)		
	0007	Partner identification code qualifier	C an..4	O
		<i>14 EAN International</i>		
	0014	Routing address	C an..14	O
0083		ACTION, CODED	M an1	M
		<i>1 Acknowledged (this level and all lower levels)</i>		
		While this code no longer is in the UN/EDIFACT code list for D96.A, it has been included for migration purposes only. The preferred code to use is Code 7.		
		<i>4 This level and all lower levels rejected</i>		
		<i>7 This level acknowledged, next lower level acknowledged if not explicitly rejected</i>		
0085		SYNTAX ERROR, CODED	C an1	X
0013		SEGMENT TAG, CODED	C an1	X
S011		DATA ELEMENT POSITION	C	X
	0098	Erroneous data element position insegment	M an1	X
	1004	Document/message number	C an..35	X

Group: **UCM** Segment Group 1: MESSAGE RESPONSE
Position: 0040
Group:
Level: 1
Usage: Conditional (Optional)
Max Use: 999999
Purpose: A group of segments sent in response to a message in the interchange identified in the UCI segment. This segment group is only used if the subject interchange does not contain functional groups.
Notes: Segment group is optional as it is optional to acknowledge at individual message level within an interchange.

Segment Summary

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max. Use</u>	<u>Group: Repeat</u>
M	0050	UCM	MESSAGE RESPONSE	M	1	

Segment: **UCM MESSAGE RESPONSE**
Position: 0050 (Trigger Segment)
Group: SG1
Level: 1
Usage: Mandatory
Max Use: 1
Purpose:
Notes:

To identify a message in the subject interchange, to indicate that message's acknowledgement or rejection (action taken), and to identify any error related to the UNH and UNT segments.

Data Element Summary

<u>Data Element</u>	<u>Component Element</u>	<u>Name</u>	<u>Base Attributes</u>	<u>User Attributes</u>
0062		MESSAGE REFERENCE NUMBER	M an..14	M
S009		MESSAGE IDENTIFIER	M	M
	0065	Message type identifier	M an..6	M
		For example . . .		
		<i>ORDERS Purchase order message</i>		
		<i>ORDRSP Purchase order response message</i>		
	0052	Message type version number	M an..3	M
		For example . . .		
		<i>D Draft directory</i>		
	0054	Message type release number	M an..3	M
		For example . . .		
		<i>96A Version 96A</i>		
	0051	Controlling agency	M an..2	M
		<i>UN UN/ECE/TRADE/WP.4, United Nations Standard Messages (UNSM)</i>		
	0057	Association assigned code	C an..6	R
		For Example "EAN008"		
0083		ACTION, CODED	M an1	M
		<i>1 Acknowledged (this level and all lower levels)</i>		
		While this code no longer is in the UN/EDIFACT code list for D96.A it has been included for migration purposes only. The preferred code to use is Code 7.		
		<i>4 This level and all lower levels rejected</i>		
		<i>7 This level acknowledged, next lower level acknowledged if not explicitly rejected</i>		
0085		SYNTAX ERROR, CODED	C an1	X
0013		SEGMENT TAG, CODED	C an1	X
S011		DATA ELEMENT POSITION	C	X
	0098	Erroneous data element position insegment	M an1	X
	1004	Document/message number	C an..35	X

Segment: **UNT** Message Trailer
Position: 0100
Group:
Level: 0
Usage: Mandatory
Max Use: 1
Purpose: To end and check the completeness of a message.
Notes: Segment Notes.

This segment is a mandatory UN/EDIFACT segment. It must always be the last segment in the message.

Example :

UNT+10+ME000001'

Data Element Summary

<u>Data Element</u>	<u>Component Element</u>	<u>Name</u>	<u>Base Attributes</u>	<u>User Attributes</u>
0074		NUMBER OF SEGMENTS IN A MESSAGE	M n..6	M
		The total number of segments in the message is specified here.		
0062		MESSAGE REFERENCE NUMBER	M an..14	M
		The message reference numbered detailed here should equal the one specified in the UNH segment		