

THE SYNTAX AND SERVICE REPORT

THE SYNTAX AND SERVICE REPORT MESSAGE**1. Introduction***** Status**

MESSAGE TYPE : CONTRL
REFERENCE DIRECTORY : D.96A
EANCOM SUBSET VERSION : 002

*** Definition**

A Syntax and Service Report message is a message syntactically acknowledging, or rejecting with error indication, a received interchange, or message.

*** Principles**

A sender of an EDIFACT interchange can in the UNB segment, using data element 0031, 'Acknowledgement request', request a response from the receiver indicating receipt of the interchange, and if necessary, whether the syntax of all contained segments is correct and supported by the recipient.

The interchange may be responded to in two ways:

- 1 - acknowledge or reject the interchange or message and list any errors contained therein.
- 2 - acknowledge only the receipt. This requires that the UNB, UNZ and the UNA if used, be checked.

The EANCOM CONTRL message will not be used to report on functional groups. The use of functional groups within EANCOM is not a recommended practice.

The CONTRL message is used to report on the syntax level of an interchange not the business information/data content contained.

A recipient may choose to acknowledge syntactical errors which are deemed to be non-fatal by the recipient, e.g. data element exceeding the maximum length.

The CONTRL message will be generated by the recipient of another message. The application which carries out the syntax check may be a third party acting on behalf of the message recipient, e.g. a value added network. When this function is carried out by a third party, the third party should not stop progress of the message to its destination, but should report results to the message recipient according to procedures agreed between the recipient and the third party. The message sender and the message recipient always retain the responsibility for the business use of the CONTRL message.

A CONTRL message shall only be generated when the recipient of the message supports the receipt

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of a CONTRL message. This agreement would normally be detailed in the interchange agreement.

A CONTRL message must always be sent as a separate interchange.

A CONTRL message may only ever report the action taken for one interchange. It may not refer to several, or parts of several interchanges.

The CONTRL message may acknowledge or reject a complete interchange without referencing messages contained within it.

* **Additional Notes**

1. Relationship between CONTRL and original interchange.

A maximum of two CONTRL messages may be sent in response to a received interchange, an optional acknowledgement of receipt of the interchange, and/or, a report on the results of the syntax check of the interchange. The second type of CONTRL message must be sent if a request for acknowledgement is indicated in the original interchange UNB segment.

The CONTRL message is based on four segments each of which refers to a particular area in the original interchange :

CONTRL Segment Tag	Original Interchange Segments
UCI - Interchange Response	UNA / UNB / UNZ
UCM - Message Response	Full Message
UCS - Segment Error Indication	All Segments
UCD - Data Element Error Indication	All Simple, Composite, or Component Data Elements

Each of the above four CONTRL segments contains a data element indicating the action taken and if required the error being reported.

When acknowledging only the receipt of an interchange segment groups 1 (maximum 1 per message) shall not be used.

2. Use of Action Codes.

The action, either acknowledgement or rejection, is indicated by a code in the UCI and/or UCM segments. The codes allocated to the 'Syntax error, coded', data element 0085, are contained in the code list for this data element (Part III of this manual).

When referencing a level, a segment from the referenced level must be contained in the CONTRL message. When referencing lower levels, all levels above the lower levels must be acknowledged.

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Action code 4 and 7 are only used in CONTRL messages reporting the action after a complete check of the interchange. Action code 8 is only used to acknowledge receipt of the interchange.

3. Syntactical Error Reporting.

Errors may be reported for all levels in an interchange using the CONTRL message. The position and nature of the error may be indicated.

The UCI and UCM segments may only report one error per level referenced. If more than one error is detected within a level, the receiver of the interchange may choose to either indicate one of the identified errors or all errors. Reporting of several errors in an interchange is achieved through the use of the relevant group repeated for each error level. Several CONTRL messages shall not be sent to report several errors.

It is recommended that errors, and their positions, should be identified as precisely as possible. Use of more general error codes in place of more precise ones is strongly discouraged. Identification of the precise location of an error will usually require access to the interchange in the format in which it was transferred.

4. UN-supported Errors.

The CONTRL message contains several mandatory data elements which are copied from the original interchange, e.g. in the UCM segment data elements 0062 through 0057 inclusive are copied from the UNH segment. If the data element in the original interchange is missing or syntactically invalid then a syntactically valid CONTRL message can not be generated. If the trading parties have not agreed to allow syntactically incorrect data in the CONTRL message then the error must be reported through means other than the CONTRL message.

5. Acknowledgement of a CONTRL message.

No CONTRL, or other message types in UN/EDIFACT, shall be sent in response to a received CONTRL message. Errors in received CONTRL messages must be reported by other means.

6. Support of the CONTRL message type.

Parties requesting acknowledgement by means of the 'Acknowledgement request' data element in the UNB segment must support the receipt of the CONTRL message type. Requirements for the submission and receipt of the CONTRL message should be agreed between trading parties.

All parties supporting the receipt or submission of the CONTRL message must be able to check all parts of the interchange in the case of the sender, and, be able to understand all information (and report errors) at all reporting levels in the case of the receiver.

7. Terms and definitions.

* **Acknowledgement** implies that the recipient of the interchange :

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- has received the acknowledged part of the interchange, and
- has checked that there are no fatal syntactic errors in the acknowledged part that prevents further processing of it, and
- has checked that all received service segments in the acknowledged part are semantically correct (if no errors were reported), and
- will comply with the actions requested in the service segments, and
- has accepted liability for notifying the sender by other means than sending a CONTRL message if
 - any syntactic or semantic errors as described above are later detected in the relevant part, or
 - the part can not be processed for some other reason after the part has been acknowledged in a submitted CONTRL message,
- has taken reasonable precautions in order to ensure that such errors are detected and that the sender is notified.

* **Rejection** implies that the recipient of the subject interchange

- can not acknowledge the interchange or relevant part of it for reasons indicated in the CONTRL message, and
- will not take any further action on business information contained in the rejected part of the interchange.

* **Reporting level** is a segment in CONTRL in which reporting of a corresponding referenced level takes place. The reporting levels are UCI, UCM, UCS and UCD.

* **Referenced level** - the structure of the CONTRL message is based on four segments (UCI, UCD, UCS and UCM) that contain a reference to a part of the interchange. The parts of the interchange are detailed in Additional Notes, section 1 above.

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2. Message Structure Chart

Syntax And Service Report Heading Section

UNH	1	M	1	MESSAGE HEADER
UCI	2	M	1	INTERCHANGE RESPONSE

Syntax And Service Report Detail Section

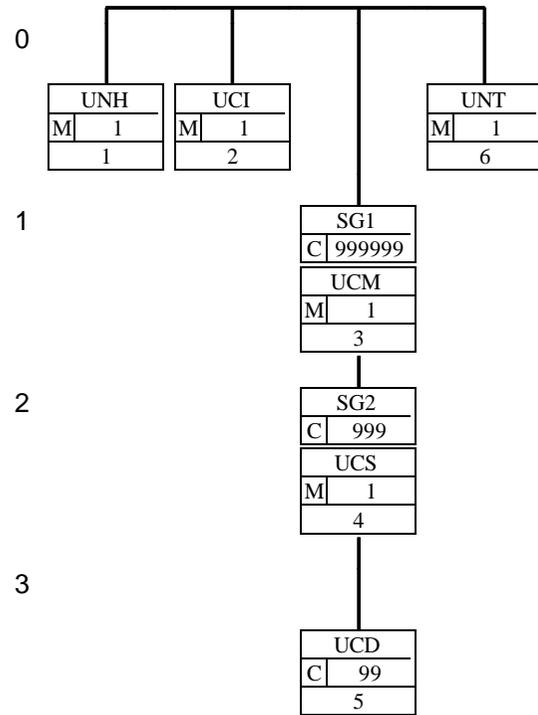
	SG1		C	999999	UCM-SG2
	UCM	3	M	1	MESSAGE RESPONSE
	SG2		C	999	UCS-UCD
	UCS	4	M	1	SEGMENT ERROR INDICATION
	UCD	5	C	99	DATA ELEMENT ERROR INDICATOR

Syntax And Service Report Summary Section

UNT	6	M	1	MESSAGE TRAILER
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3. Branching Diagram



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UNH - M 1 - MESSAGE HEADER

This segment is used to head, identify and specify a message.

Syntax and Service Report Detail Section

UCI - M 1 - INTERCHANGE RESPONSE

This segment is used to identify the interchange being responded to.

SG1 - C 999999 - UCM-SG2

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.

UCM - M 1 - MESSAGE RESPONSE

This segment is used to identify specific messages within the interchange identified in the previous UCI segment.

SG2 - C 999 - UCS-UCD

A group of segments sent in response to a segment containing one or more errors and which was part of the message identified by the UCM segment in segment group 1.

UCS - M 1 - SEGMENT ERROR INDICATION

This segment is used to identify the position of a segment within a message. This segment is only used to identify segments within the message identified in the UCM segment which have errors.

UCD - C 99 - DATA ELEMENT ERROR INDICATOR

This segment is used to identify the position of a component or composite data element within a segment. This segment is only used to identify component or composite data elements within the segment identified in the UCS segment which have errors.

Syntax and Service Report Summary Section

UNT - M 1 - MESSAGE TRAILER

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

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5. Segments Layout

This section describes each segment used in the EANCOM Syntax and Service Report message. The original EDIFACT segment layout is listed. The appropriate comments relevant to the EANCOM subset are indicated.

Notes:

1. The segments are presented in the sequence in which they appear in the message. The segment or segment group tag is followed by the (M)andatory / (C)onditional indicator, the maximum number of occurrences and the segment description.
2. Reading from left to right, in column one, the data element tags and descriptions are shown, followed by in the second column the EDIFACT status (M or C), the field format, and the picture of the data elements. These first pieces of information constitute the original EDIFACT segment layout.

Following the EDIFACT information, EANCOM specific information is provided in the third, fourth, and fifth columns. In the third column a status indicator for the use of (C)onditional EDIFACT data elements (see 2.1 through 2.3 below), in the fourth column the restricted indicator (see point 3 on the following page), and in the fifth column notes and code values used for specific data elements in the message.

- 2.1 (M)andatory data elements in EDIFACT segments retain their status in EANCOM.
- 2.2 Additionally, there are five types of status for data elements with a (C)onditional EDIFACT status, whether for simple, component or composite data elements. These are listed below and can be identified when relevant by the following abbreviations:

-	REQUIRED	R	Indicates that the entity is required and must be sent.
-	ADVISED	A	Indicates that the entity is advised or recommended.
-	DEPENDENT	D	Indicates that the entity must be sent in certain conditions, as defined by the relevant explanatory note.
-	OPTIONAL	O	Indicates that the entity is optional and may be sent at the discretion of the user.
-	NOT USED	N	Indicates that the entity is not used and should be omitted.

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- 2.3 If a composite is flagged as **N, NOT USED**, all data elements within that composite will have blank status indicators assigned to them.
3. Status indicators detailed in the fourth column which directly relate to the code values detailed in the fifth column may have two values;
- RESTRICTED * A data element marked with an asterisk (*) in the fourth column indicates that the listed codes in column five are the only codes available for use with this data element, in this segment, in this message.
 - OPEN All data elements where coded representation of data is possible and a restricted set of code values is not indicated are open (no asterisk in fourth column). The available codes are listed in the EANCOM Data Elements and Code Sets Directory. Code values may be given as examples or there may be a note on the format or type of code to be used.

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UNH - M 1 - MESSAGE HEADER				
Function : To head, identify and specify a message.				
Segment number : 1				
	EDIFACT	EAN	*	Description
0062 Message reference number	M an..14	M		Senders unique message reference. Sequence number of messages in the interchange. DE 0062 in the UNT will have the same value. Generated by the sender.
S009 MESSAGE IDENTIFIER	M	M		
0065 Message type identifier	M an..6	M	*	CONTRL = Syntax and service message
0052 Message type version number	M an..3	M	*	D = Draft directory
0054 Message type release number	M an..3	M	*	96A = Version 96A
0051 Controlling agency	M an..2	M	*	UN = UN/ECE/TRADE/WP.4, United Nations Standard Messages (UNSM)
0057 Association assigned code	C an..6	R	*	EAN002 = EAN Version Control Number.
0068 Common access reference	C an..35	N		
S010 STATUS OF THE TRANSFER	C	N		
0070 Sequence message transfer number	M n..2			
0073 First/last sequence message transfer indication	C a1			
<u>Segment Notes.</u>				
This segment is used to head, identify and specify a message.				
DE 0065: Indicates that the message is a Syntax and Service Report message.				
DE 0057: Indicates that the message is an EANCOM version 002 of the Syntax and Service Report message.				
Example :				
UNH+ ME000001+ CONTRL:2:2:UN:EAN002'				

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UCI - M 1 - INTERCHANGE RESPONSE				
Function :		To identify the subject interchange, to indicate 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.		
Segment number :		2		
	EDIFACT	EAN	*	Description
0020 Interchange control reference	M an..14	M		
S002 INTERCHANGE SENDER	M	M		
0004 Sender identification	M an..35	M		
0007 Partner identification code qualifier	C an..4	O	*	14 = EAN International
0008 Address for reverse routing	C an..14	O		
S003 INTERCHANGE RECIPIENT	M	M		
0010 Recipient identification	M an..35	M		
0007 Partner identification code qualifier	C an..4	O	*	14 = EAN International
0014 Routing address	C an..14	O		
0083 Action, coded	M an..3	M		4 = This level and all lower levels rejected 6 = UNB/UNZ rejected 7 = This level acknowledged, next lower level acknowledged if not explicitly rejected 8 = Interchange received
0085 Syntax error, coded	C an..3	D	*	2 = Syntax level or version not supported 7 = Interchange recipient not actual recipient 12 = Invalid value 13 = Missing 14 = Value not supported in this position 15 = Not supported in this position 16 = Too many constituents 17 = No agreement 18 = Unspecified error 19 = Invalid decimal notation 20 = Character invalid as service character 21 = Invalid character(s) 22 = Invalid service character(s) 23 = Unknown interchange sender 24 = Too old 25 = Test indicator not supported 26 = Duplicate detected 27 = Security function not supported 28 = References do not match 29 = Control count does not match number of instances received 30 = Functional groups and messages mixed 32 = Lower level empty 33 = Invalid occurrence outside message or functional group 37 = Invalid type of character(s) 39 = Data element too long

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UCI - M				1 - INTERCHANGE RESPONSE
Function :		To identify the subject interchange, to indicate 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.		
Segment number :		2		
	EDIFACT	EAN	*	Description
				40 = Data element too short 41 = Permanent communication network error 42 = Temporary communication network error 43 = Unknown interchange recipient
0013	Segment tag, coded	C a3	D	
S011	DATA ELEMENT POSITION	C	D	
0098	Erroneous data element position in segment	M n..3	M	
0104	Erroneous component data element position	C n..3	O	
<u>Segment Notes.</u>				
This segment is used to identify the interchange being responded to.				
The segment may also be used to indicate acknowledgement or rejection of the UNA, UNB and UNZ segments and any errors present in these segments.				
DE's 0020, S002 and S003: To identify the interchange being responded to these data elements must contain the same values as were specified in the UNB segment of the original interchange.				
DE's 0083 and 0085: These data elements are used to indicate the status of the interchange and in cases where errors are present to identify the error.				
DE's 0013, S011: If there are errors in the UNA, UNB or UNZ segments the segment in question and the position of the error in the segment may be identified in these data elements.				
DE 0098: The numerical count position of the simple or composite data element in error. The segment tag and each simple and composite data element position number within the segment.				
DE 0104: The numerical count position of the component data element in error. Each component data element position defined in the composite data element description shall cause the count to be incremented.				
Example :				
UCI+ 10001+ 5412345000013:14+ 5412345000020:14+ 8'				
Interchange number 10001 from the party identified by the EAN location number 5412345000013 to the party identified by the EAN location number 5412345000020 has been received.				
Dependency Notes :				
Data elements 0085, 0013 and S011 are only used when errors are being reported.				

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SG1 - C 999999 - UCM-SG2				
UCM - M 1 - MESSAGE RESPONSE				
Function : 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.				
Segment number : 3				
	EDIFACT	EAN	*	Description
0062 Message reference number	M an..14	M		
S009 MESSAGE IDENTIFIER	M	M		
0065 Message type identifier	M an..6	M		
0052 Message type version number	M an..3	M		
0054 Message type release number	M an..3	M		
0051 Controlling agency	M an..2	M		
0057 Association assigned code	C an..6	R		
0083 Action, coded	M an..3	M		4 = Rejected - this level and all lower levels 7 = This level acknowledged, next level acknowledged if not explicitly rejected
0085 Syntax error, coded	C an..3	D	*	12 = Invalid value 13 = Missing 14 = Value not supported in this position 15 = Not supported in this position 16 = Too many constituents 17 = No agreement 18 = Unspecified error 21 = Invalid character(s) 22 = Invalid service character(s) 23 = Unknown interchange sender 25 = Test indicator not supported 26 = Duplicate detected 27 = Security function not supported 28 = References do not match 29 = Control count does not match number of instances received 30 = Functional groups and messages mixed 31 = More than one message type in group 34 = Nesting indicator not allowed 37 = Invalid type of character(s) 39 = Data element too long 40 = Data element too short
0013 Segment tag, coded	C a3	D		
S011 DATA ELEMENT POSITION	C	D		
0098 Erroneous data element position in segment	M n..3	M		
0104 Erroneous component data element position	C n..3	O		
<u>Segment Notes.</u>				

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SG1 - C	999999 - UCM-SG2
UCM - M	1 - MESSAGE RESPONSE
Function :	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.
Segment number :	3
<p>This segment is used to identify specific messages within the interchange identified in the previous UCI segment.</p> <p>This segment is similar in layout to the UNH segment (data elements 0062 to 0057 inclusive) and should contain the same information as that contained in the UNH segment.</p> <p>DE's 0083 and 0085: These data elements are used to indicate the status of the message and in cases where errors are present to identify the error.</p> <p>DE's 0013, S011: If there are errors in the UNH or UNT segments the segment in question and the position of the error in the segment may be identified in these data elements.</p> <p>DE 0098: The numerical count position of the simple or composite data element in error. The segment tag and each simple and composite data element position number within the segment.</p> <p>DE 0104: The numerical count position of the component data element in error. Each component data element position defined in the composite data element description shall cause the count to be incremented.</p> <p>Example :</p> <p>UCM+ ME002341+ INVOIC:D:96A:UN:EAN008+ 4+ 13+ UNH+ 2'</p> <p>Message reference ME002341, an INVOIC message, has been rejected because the mandatory data element 0062 has not been included in the UNH segment position 2.</p> <p>Dependency Notes :</p> <p>Data elements 0085, 0013 and S011 are only used when errors are being reported.</p>	

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SG1 - C	999999 - UCM-SG2
SG2 - C	999 - UCS-UCD
UCS - M	1 - SEGMENT ERROR INDICATION
Function :	To identify either a segment containing an error or a missing segment, and to identify any error related to the complete segment.
Segment number :	4
	EDIFACT EAN * Description
0096 Segment position in message	M n..6 M
0085 Syntax error, coded	C an..3 O *
	12 = Invalid value 13 = Missing 14 = Value not supported in this position 15 = Not supported in this position 16 = Too many constituents 18 = Unspecified error 21 = Invalid character(s) 22 = Invalid service character(s) 27 = Security function not supported 34 = Nesting indicator not allowed 35 = Too many segment repetitions 36 = Too many segment group repetitions
<u>Segment Notes.</u>	
This segment is used to identify the position of a segment within a message. This segment is only used to identify segments within the message identified in the UCM segment which have errors.	
DE 0085: This data element may be used to identify an error related to the complete segment.	
DE 0096: The numerical count position of a specific segment that is within the received message. The numbering starts with, and includes, the UNH segment as segment number 1. To identify a segment that contains an error, use the numerical count position of that segment. To report that a segment that is missing use the numerical count position of the last segment that was processed prior to the position where the missing segment was expected to be. A missing segment group is denoted by identifying the first segment in the group as missing.	
Example :	
UCS+ 3+ 12'	

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SG1 - C	999999 - UCM-SG2
SG2 - C	999 - UCS-UCD
UCD - C	99 - DATA ELEMENT ERROR INDICATOR
Function :	To identify an erroneous simple, composite or component data element, and to identify the nature of the error.
Segment number :	5
	EDIFACT EAN * Description
0085 Syntax error, coded	M an..3 M * 12 = Invalid value 13 = Missing 14 = Value not supported in this position 15 = Not supported in this position 16 = Too many constituents 18 = Unspecified error 19 = Invalid decimal notation 21 = Invalid character(s) 22 = Invalid service character(s) 27 = Security function not supported 34 = Nesting indicator not allowed 37 = Invalid type of character(s) 38 = Missing digit in front of decimal sign 39 = Data element too long 40 = Data element too short
S011 DATA ELEMENT POSITION	M M
0098 Erroneous data element position in segment	M n..3 M
0104 Erroneous component data element position	C n..3 O
<u>Segment Notes.</u>	
<p>This segment is used to identify the position of a component or composite data element within a segment. This segment is only used to identify component or composite data elements within the segment identified in the UCS segment which have errors.</p> <p>DE 0098: The numerical count position of the simple or composite data element in error. The segment tag and each simple and composite data element position number within the segment.</p> <p>DE 0104: The numerical count position of the component data element in error. Each component data element position defined in the composite data element description shall cause the count to be incremented.</p> <p>Example :</p> <p>UCD+ 12+ 4:4'</p>	

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UNT - M 1 - MESSAGE TRAILER				
Function : To end and check the completeness of a message.				
Segment number : 6				
	EDIFACT	EAN	*	Description
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.
<u>Segment Notes.</u>				
This segment is a mandatory UN/EDIFACT segment. It must always be the last segment in the message.				
Example :				
UNT+ 10+ ME000001'				

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Examples of a Syntax and Service Report messageExample 1

The following is an example of a simple Syntax and Service Report message. The CONTRL message has a message reference number of ME004321.

The message is acknowledging the receipt of the interchange number 10001 sent by the party identified by the EAN location number 5412345000013 to the party identified by the EAN location number 541234500023

UNH+ ME004321+ CONTRL:2:2:UN:EAN002'

UCI+ 10001+ 5412345000013:14+ 5412345000020:14+ 8'

UNT+ 3+ ME004321'

Message header

Message relates to interchange number 10001, sent from the party identified by the EAN location number 5412345000013, sent to the party identified by the EAN location number 5412345000020, the interchange is acknowledged as received

Message trailer, 3 segments in message

Example 2

The following is an example of a more detailed Syntax and Service Report message. The CONTRL message has a message reference number of ME000231.

The message is responding to the receipt of the interchange number 542 sent by the party identified by the EAN location number 5412345000013 to the party identified by the EAN location number 541234500020.

An invoice message contained within the interchange is identified using its original message reference number, ME002341. The interchange (which contained only one message) is rejected along with the INVOIC message in the interchange because the DTM segment which should appear as segment number 3 is missing.

UNH+ ME000231+ CONTRL:2:2:UN:EAN002'

UCI+ 542+ 5412345000013:14+ 5412345000020:14+ 8'

UCM+ ME002341+ INVOIC:D:96A:UN:EAN008+ 4'

UCS+ 3+ 13'

UNT+ 5+ ME000231'

Message header

Message relates to interchange number 542, sent from the party identified by the EAN location number 5412345000013, sent to the party identified by the EAN location number 5412345000020, the interchange is acknowledged as received

Message number ME002341, an INVOIC message based on the EDIFACT D.96A directory and the EANCOM version number 008, is rejected

An error is reported in that segment number 3, which is mandatory, is missing

Message trailer, 5 segments in message

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