EANCOM® 2002 S3

Service Segments
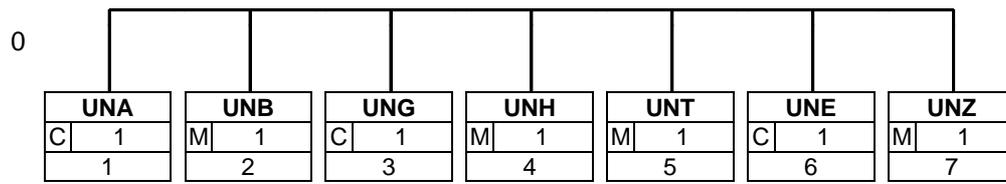
Edition 2016

2. Message Structure Chart

UNA	1	C	1	- Service string advice
UNB	2	M	1	- Interchange header
UNG	3	C	1	- Functional group header
UNH	4	M	1	- Message header
UNT	5	M	1	- Message trailer
UNE	6	C	1	- Functional group trailer
UNZ	7	M	1	- Interchange trailer

3. Branching Diagram

	UNA	UNB	UNG	UNH	UNT	UNE	UNZ
	C 1	M 1	C 1	M 1	M 1	C 1	M 1
0	1	2	3	4	5	6	7

4. Segments Description

UNA - C 1   - Service string advice

The service string advice shall begin with the upper case characters UNA immediately followed by six characters in the order shown below. The same character shall not be used in more than one position of the UNA.

UNB - M 1   - Interchange header

This segment is used to envelope the interchange, as well as to identify both, the party to whom the interchange is sent and the party who has sent the interchange. The principle of the UNB segment is the same as a physical envelope which covers one or more letters or documents, and which details, both the address where delivery is to take place and the address from where the envelope has come.

UNG - C 1   - Functional group header

Within EANCOM® the use of the UNG..UNE segments should not be used for grouping of multiple message types in the same interchange as this is not considered good practice. However, they can be used by organisations to create their own identifiable application level envelopes, which can be addressed from the originating department to a department in the recipient's system, e.g. to group multiple issuers in one transmission file with invoices.

UNH - M 1   - Message header

UNT - M 1   - Message trailer

UNE - C 1   - Functional group trailer

Within EANCOM® the use of the UNG..UNE segments should not be used for grouping of multiple message types in the same interchange as this is not considered good practice. However, they can be used by organisations to create their own identifiable application level envelopes, which can be addressed from the originating department to a department in the recipient's system, e.g. to group multiple issuers in one transmission file with invoices.

UNZ - M 1   - Interchange trailer

This segment is used to provide the trailer of an interchange.

5. Segments Layout

Notes:

1. The segments are presented in the sequence in which they appear in the interxchange. 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 segment.

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.

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.

4. Different colours are used for the code values in the segment details: restricted codes are in red and open codes in blue.

5. Segments Layout

Segment number: 1

UNA	- C	1 - Service string advice			

Function:
To define the characters selected for use as delimiters and indicators in the rest of the interchange that follows.

		EDIFACT	GS1	*	Description
UNA1	Component data element separator	M an1	**M**	*	Used as a separator between component data elements contained within a composite data element (default value: ":")
UNA2	Data element separator	M an1	**M**	*	Used to separate two simple or composite data elements (default value: "+")
UNA3	Decimal notation	M an1	**M**	*	Used to indicate the character used for decimal notation (default value:".")
UNA4	Release indicator	M an1	**M**	*	Used to restore any service character to its original specification (value: "?").
UNA5	Reserved for future use	M an1	**M**	*	(default value: space)
UNA6	Segment terminator	M an1	**M**	*	Used to indicate the end of segment data (default value: " ' ")

Segment Notes:

The service string advice shall begin with the upper case characters UNA immediately followed by six characters
in the order shown below. The same character shall not be used in more than one position of the UNA.
UNA:+.? '
This segment is used to inform the receiver of the interchange that a set of service string characters which are
different to the default characters are being used.

When using the default set of service characters, the UNA segment need not be sent. If it is sent, it must
immediately precede the UNB segment and contain the four service string characters (positions UNA1, UNA2,
UNA4 and UNA6) selected by the interchange sender.

Regardless of whether or not all of the service string characters are being changed every data element within this
segment must be filled, (i.e., if some default values are being used with user defined ones, both the default and
user defined values must be specified).

When expressing the service string characters in the UNA segment, it is not necessary to include any element
separators.

The use of the UNA segment is required when using a character set other than level A.

5. Segments Layout

Segment number: 2

UNB	- M	1 - Interchange header

Function:

To start, identify and specify an interchange.

		EDIFACT	GS1	*	Description
S001	SYNTAX IDENTIFIER	M	M		See Part I chapter 5.2.7 and segment notes.
0001	Syntax identifier	M a4	M	*	UNOA = UN/ECE level A UNOB = UN/ECE level B UNOC = UN/ECE level C UNOD = UN/ECE level D UNOE = UN/ECE level E UNOF = UN/ECE level F
0002	Syntax version number	M n1	M	*	3 = Version 3
S002	INTERCHANGE SENDER	M	M		
0004	Sender identification	M an..35	M		GLN (n13)
0007	Partner identification code qualifier	C an..4	R	*	14 = GS1
0008	Address for reverse routing	C an..14	O		
S003	INTERCHANGE RECIPIENT	M	M		
0010	Recipient identification	M an..35	M		GLN (n13)
0007	Partner identification code qualifier	C an..4	R	*	14 = GS1
0014	Routing address	C an..14	O		
S004	DATE/TIME OF PREPARATION	M	M		
0017	Date of preparation	M n6	M		YYMMDD
0019	Time of preparation	M n4	M		HHMM
0020	Interchange control reference	M an..14	M		Unique reference identifying the interchange. Created by the interchange sender.
S005	RECIPIENT'S REFERENCE, PASSWORD	C	O		
0022	Recipient's reference/ password	M an..14	M		
0025	Recipient's reference/ password qualifier	C an2	O		
0026	Application reference	C an..14	O		Message identification if the interchange contains only one type of message.
0029	Processing priority code	C a1	O		A = Highest priority
0031	Acknowledgement request	C n1	O		1 = Requested
0032	Communications agreement ID	C an..35	O	*	EANCOM......
0035	Test indicator	C n1	O		1 = Interchange is a test

Segment Notes:

This segment is used to envelope the interchange, as well as to identify both, the party to whom the interchange is sent and the party who has sent the interchange. The principle of the UNB segment is the same as a physical envelope which covers one or more letters or documents, and which details, both the address where delivery is to take place and the address from where the envelope has come.

5. Segments Layout

Segment number: 2

S001: The character encoding specified in basic code table of ISO/IEC 646 (7-bit coded character set for information interchange) shall be used for the interchange service string advice (if used) and up to and including the composite data element S001 'Syntax identifier' in the interchange header. The character repertoire used for the characters in an interchange shall be identified from the code value of data element 0001 in S001 'Syntax identifier' in the interchange header. The character repertoire identified does not apply to objects and/or encrypted data.

The default encoding technique for a particular repertoire shall be the encoding technique defined by its associated character set specification.

DE 0001: The recommended (default) character set for use in EANCOM® for international exchanges is character set A (UNOA). Should users wish to use character sets other than A, an agreement on which set to use should be reached on a bilateral basis before communications begin.

DE 0004, 0008, 0010, 0014, 0042 and 0046: Within EANCOM® the use of the Global Location Number (GLN) is recommended for the identification of the interchange sender and recipient.

DE 0008: Identification (e.g. a division) specified by the sender of the interchange, to be included if agreed, by the recipient in response interchanges, to facilitate internal routing.

DE 0042: Sub-level of sender internal identification, when further sub-level identification is required.

DE 0014: The address for routing, provided beforehand by the interchange recipient, is used by the interchange sender to inform the recipient of the internal address, within the latter's systems, to which the interchange should be routed. It is recommended that the GLN be used for this purpose.

DE 0007: Identification (e.g. a division) specified by the recipient of the interchange, to be included if agreed, by the sender in response interchanges, to facilitate internal routing.

DE 0046: Sub-level of recipient internal identification, when further sub-level identification is required.

DE S004: The date and time specified in this composite should be the date and time at which the interchange sender prepared the interchange. This date and time may not necessarily be the same as the date and time of contained messages.

DE 0020: The interchange control reference number is generated by the interchange sender and is used to identify uniquely each interchange. Should the interchange sender wish to re-use interchange control reference numbers, it is recommended that each number be preserved for at least a period of three months before being re-used. In order to guarantee uniqueness, the interchange control reference number should always be linked to the interchange sender's identification (DE 0004).

DE S005: The use of passwords must first be agreed bilaterally by the parties exchanging the interchange.

DE 0026: This data element is used to identify the application, on the interchange recipient's system, to which the interchange is directed. This data element may only be used if the interchange contains only one type of message, (e.g. only invoices). The reference used in this data element is assigned by the interchange sender.

DE 0031: This data element is used to indicate whether an acknowledgement to the interchange is required. The EANCOM® APERAK or CONTRL message should be used to provide acknowledgement of interchange receipt. In addition, the EANCOM® CONTRL message may be used to indicate when an interchange has been rejected due to syntax errors.

DE 0032: This data element is used to identify any underlying agreements which control the exchange of data. Within EANCOM® , the identity of such agreements must start with the letters 'EANCOM', the remaining characters within the data element being filled according to bilateral agreements.

UNB+UNOA:3+5412345678908:14+8798765432106:14+020102:1000+12345555+++++EANCOMREF 52'

5. Segments Layout

Segment number: 3

UNG	- C	1 - Functional group header

Function:

To head, identify and specify a functional group.

		EDIFACT	GS1	*	Description
0038	Functional group identification	M an..6	**M**		Identification of a message contained in the functional group, e.g. INVOIC.
S006	APPLICATION SENDER'S IDENTIFICATION	M	**M**		
0040	Sender identification	M an..35	**M**		GLN (n13)
0007	Partner identification code qualifier	C an..4	**R**	*	14 = GS1
S007	APPLICATION RECIPIENT'S IDENTIFICATION	M	**M**		
0044	Recipient's identification	M an..35	**M**		GLN (n13)
0007	Partner identification code qualifier	C an..4	**R**	*	14 = GS1
S004	DATE/TIME OF PREPARATION	M	**M**		
0017	Date of preparation	M n6	**M**		YYMMDD
0019	Time of preparation	M n4	**M**		HHMM
0048	Functional group reference number	M an..14	**M**		Unique reference identifying the functional group. Created by the interchange sender.
0051	Controlling agency	M an..2	**M**	*	UN = UN/CEFACT
S008	MESSAGE VERSION	M	**M**		
0052	Message version number	M an..3	**M**	*	D = Draft version/UN/EDIFACT Directory
0054	Message release number	M an..3	**M**	*	The value of this data element depends on the message type. 01B = Release 2001 - B
0057	Association assigned code	C an..6	**R**		The value of this data element depends on the message type.
0058	Application password	C an..14	**D**		The use of this data element depends on agreements between the trading partners.

Segment Notes:

Within EANCOM® the use of the UNG..UNE segments should not be used for grouping of multiple message types in the same interchange as this is not considered good practice. However, they can be used by organisations to create their own identifiable application level envelopes, which can be addressed from the originating department to a department in the recipient's system, e.g. to group multiple issuers in one transmission file with invoices.
UNG+INVOIC+5412345678908:14+8798765432106:14+020102:1000+471123+UN+D:01B:EAN010'

5. Segments Layout

Segment number: 4

UNH	- M	1 - Message header				
Function:						
To head, identify and specify a message.						
			EDIFACT	GS1	*	Description
0062	Message reference number		M an..14	**M**		
S009	MESSAGE IDENTIFIER		M	**M**		
0065	Message type		M an..6	**M**		
0052	Message version number		M an..3	**M**		
0054	Message release number		M an..3	**M**		
0051	Controlling agency		M an..2	**M**		
0057	Association assigned code		C an..6	**C**		
0068	Common access reference		C an..35	**N**		
S010	STATUS OF THE TRANSFER		C	**N**		
0070	Sequence of transfers		M n..2			
0073	First and last transfer		C a1			
Segment Notes:						

5. Segments Layout

Segment number: 5

UNT	- M	1 - Message trailer			
Function:					
To end and check the completeness of a message.					
		EDIFACT	GS1	*	Description
0074	Number of segments in the message	M n..6	**M**		
0062	Message reference number	M an..14	**M**		
Segment Notes:					

5. Segments Layout

Segment number: 6

UNE	- C	1 - Functional group trailer			

Function:

To end and check the completeness of a functional group.

		EDIFACT	GS1	*	Description
0060	Number of messages	M n..6	**M**		Number of messages in the group.
0048	Functional group reference number	M an..14	**M**		Identical to DE 0048 in UNG segment.

Segment Notes:

Within EANCOM® the use of the UNG..UNE segments should not be used for grouping of multiple message types in the same interchange as this is not considered good practice. However, they can be used by organisations to create their own identifiable application level envelopes, which can be addressed from the originating department to a department in the recipient's system, e.g. to group multiple issuers in one transmission file with invoices.
UNE+25+471123'

5. Segments Layout

Segment number: 7

UNZ	- M	1 - Interchange trailer				

Function:

To end and check the completeness of an interchange.

		EDIFACT	GS1	*	Description
0036	Interchange control count	M n..6	**M**		Number of messages or functional groups within an interchange.
0020	Interchange control reference	M an..14	**M**		Identical to DE 0020 in UNB segment.

Segment Notes:

This segment is used to provide the trailer of an interchange.
UNZ+5+12345555'
DE 0036: If functional groups are used, this is the number of functional groups within the interchange. If functional groups are not used, this is the number of messages within the interchange.