

EANCOM 2002 Syntax 3
Edition 2016_Update 2021

Service segments

Introduction.....	2
Branching Diagram	3
Message Structure.....	4
Segmentlayout.....	5
Codes	12
Example.....	16

Einführung

Introduction

The following message specification is based on the publication of the "Service Segments" of GS1 Global in syntax 3.

Status

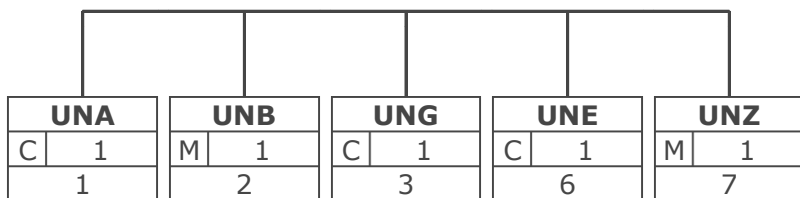
REFERENCE DIRECTORY: D.01B

Note

This is the official specification of the global EANCOM standard.

Under the tab "Anwendungsempfehlung DE" you will find the German recommendation for the application of the service segments.

Branching Diagram



Tag	
St	MaxOcc
No	

Tag = Segment/Group Tag

St = Status (M=Mandatory, C=Conditional, R=Required, O=Optional, A=Advised, D=Dependent)

MaxOcc = Maximum occurrence of the segment/group; No = Consecutive segment number

Message Structure

Seg.	No.	Status	Max Occ	Segment
UNA	1	C	1	Service string advice
UNB	2	M	1	Interchange header
UNG	3	C	1	Functional group header
UNE	4	C	1	Functional group trailer
UNZ	5	M	1	Interchange trailer

Max. Occ. = Maximum occurrence of the segment/group, Status: M=Mandatory, C=Conditional, R=Required, O=Optional, A=Advised, D=Dependent

Segment Layout

No. Seg	St	Max. Occ.				
1	UNA	C 1	Service string advice			
To define the characters selected for use as delimiters and indicators in the rest of the interchange that follows.						
Business Term	DE	EDIFACT	Format	St	*	Description
	UNA1	Component data element separator	an1	M	*	Used as a separator between component data elements contained within a composite data element (default value: ":")
	UNA2	Data element separator	an1	M	*	Used to separate two simple or composite data elements (default value: "+")
	UNA3	Decimal notation	an1	M	*	Used to indicate the character used for decimal notation (default value: ".")
	UNA4	Release indicator	an1	M	*	Used to restore any service character to its original specification (value: "?").
	UNA5	Reserved for future use	an1	M	*	(default value: space)
	UNA6	Segment terminator	an1	M	*	Used to indicate the end of segment data (default value: "'")
<p>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.</p> <p>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.</p> <p>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.</p> <p>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).</p> <p>When expressing the service string characters in the UNA segment, it is not necessary to include any element separators.</p> <p>The use of the UNA segment is required when using a character set other than level A.</p> <p>Example: UNA:+.?' '</p> <p>Example: UNA:+.?' '</p>						

Max. Occ. = Maximum Occurrence, St = Status, * = Restricted Codes
 Status: M=Mandatory, R=Required, O=Optional, C=Conditional, D=Dependent, A=Advised, N=Not used

Segment Layout

No. Seg	St	Max. Occ.			
2	UNB	M 1	Interchange header To start, identify and specify an interchange.		
Business Term	DE	EDIFACT	Format	St	* Description
	S001	Syntax identifier		M	See Part I chapter 5.2.7 and segment notes.
	0001	Syntax identifier	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	n1	M	* 3 Version 3
	S002	Interchange sender		M	
	0004	Sender identification	an..35	M	GLN (n13)
	0007	Partner identification code qualifier	an..4	R	* 14 GS1
	0008	Address for reverse routing	an..14	O	
	S003	Interchange recipient		M	
	0010	Recipient identification	an..35	M	GLN (n13)
	0007	Partner identification code qualifier	an..4	R	* 14 GS1
	0014	Routing address	an..14	O	
	S004	Date/time of preparation		M	
	0017	Date of preparation	n6	M	YYMMDD
	0019	Time of preparation	n4	M	HHMM
	0020	Interchange control reference	an..14	M	Unique reference identifying the interchange. Created by the interchange sender.
	S005	Recipient's reference, password		C	
	0022	Recipient's reference/ password	an..14	M	
	0025	Recipient's reference/ password qualifier	an2	O	
	0026	Application reference	an..14	O	Message identification if the interchange contains only one type of message.
	0029	Processing priority code	a1	O	A Highest priority
	0031	Acknowledgement request	n1	O	1 Requested
	0032	Communications agreement ID	an..35	O	* EANCOM.....
	0035	Test indicator	n1	O	1 Interchange is a test

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Segment Layout

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.

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

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Segment Layout

agreements.

Example: UNB+UNOA:3+4012345000009:14+4000004000002:14:4000004000099+021013:1043+12345555+RE
F:AA++A+1+EANCOM-DISI+1'

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

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Segment Layout

No. Seg	St	Max. Occ.			
3	UNG	C 1	Functional group header To head, identify and specify a functional group.		
Business Term	DE	EDIFACT	Format	St	* Description
	0038	Functional group identification	an..6	M	Identification of a message contained in the functional group, e.g. INVOIC.
	S006	Application sender's identification		M	
	0040	Sender identification	an..35	M	GLN (n13)
	0007	Partner identification code qualifier	an..4	R	* 14 GS1
	S007	Application recipient's identification		M	
	0044	Recipient's identification	an..35	M	GLN (n13)
	0007	Partner identification code qualifier	an..4	R	* 14 GS1
	S004	Date/time of preparation		M	
	0017	Date of preparation	n6	M	YYMMDD
	0019	Time of preparation	n4	M	HHMM
	0048	Functional group reference number	an..14	M	Unique reference identifying the functional group. Created by the interchange sender.
	0051	Controlling agency	an..2	M	* UN UN/CEFACT
	S008	Message version		M	
	0052	Message version number	an..3	M	* D Draft version/ UN/EDIFACT Directory
	0054	Message release number	an..3	M	* 01B Release 2001 - B The value of this data element depends on the message type.
	0057	Association assigned code	an..6	R	The value of this data element depends on the message type.
	0058	Application password	an..14	D	The use of this data element depends on agreements between the trading partners.
<p>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.</p> <p>Example: UNG+INVOIC+4012385946284:14+4356891275349:14+021013:1040+471123+UN+D:01B:EAN010+PASSWORT'</p> <p>Example: UNG+INVOIC+5412345678908:14+8798765432106:14+020102:1000+471123+UN+D:01B:EAN010'</p>					

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Segment Layout

No. Seg	St	Max. Occ.				
4	UNE	C 1	Functional group trailer To end and check the completeness of a functional group.			
Business Term	DE	EDIFACT	Format	St	*	Description
	0060	Number of messages	n..6	M		Number of messages in the group.
	0048	Functional group reference number	an..14	M		Identical to DE 0048 in UNG segment.
<p>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.</p> <p>Example: <code>UNE+1+471123'</code> Example: <code>UNE+25+471123'</code></p>						

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Segment Layout

No. Seg	St	Max. Occ.				
5	UNZ	M 1	Interchange trailer To end and check the completeness of an interchange.			
Business Term	DE	EDIFACT	Format	St	*	Description
	0036	Interchange control count	n..6	M		Number of messages or functional groups within an interchange.
	0020	Interchange control reference	an..14	M		Identical to DE 0020 in UNB segment.
<p>This segment is used to provide the trailer of an interchange. 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.</p> <p>Example: UNZ+1+12345555 ' Example: UNZ+5+12345555 '</p>						

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Used Codes

0001	<p>Syntax identifier Coded identification of the agency controlling a syntax and syntax level used in an interchange.</p> <p>Notes: 1. a3, upper case, Controlling Agency (e.g. UNO=UN/ECE) and a1 stating level (e.g. A) (which together give UNOA).</p>
UNOA	<p>UN/ECE level A As defined in the basic code table of ISO 646 with the exceptions of lower case letters, alternative graphic character allocations and national or application-oriented graphic character allocations.</p>
UNOB	<p>UN/ECE level B As defined in the basic code table of ISO 646 with the exceptions of alternative graphic character allocations and national or application-oriented graphic character allocations.</p>
UNOC	<p>UN/ECE level C As defined in ISO/IEC 8859-1 : Information technology - Part 1: Latin alphabet No. 1.</p>
UNOD	<p>UN/ECE level D As defined in ISO/IEC 8859-2 : Information technology - Part 2: Latin alphabet No. 2.</p>
UNOE	<p>UN/ECE level E As defined in ISO/IEC 8859-5 : Information technology - Part 5: Latin/Cyrillic alphabet.</p>
UNOF	<p>UN/ECE level F As defined in ISO 8859-7 : Information processing - Part 7: Latin/Greek alphabet.</p>
0002	<p>Syntax version number Version number of the syntax identified in the syntax identifier (0001)</p> <p>Notes: 1. Increments 1 for each version.</p>
3	<p>Version 3 ISO 9735 Amendment 1:1992. GS1 Description: Syntax version number 3. This code can be used with all of the character sets (A, B, C, D, E and F).</p>

Used Codes

0007	Partner identification code qualifier Qualifier referring to the source of codes for the identifiers of interchanging partners.
	Notes: 1. Used with sender/recipient identification code.
14	GS1 Partner identification code assigned by GS1, an international organization of GS1 Member Organizations that manages the GS1 System.
0025	Recipient's reference/password qualifier Qualifier for the recipient's reference or password.
	Notes: 1. If specified in IA.
AA	Reference Recipient's reference/password is a reference.
BB	Password Recipient's reference/password is a password.
0029	Processing priority code Code determined by the sender requesting processing priority for the interchange.
	Notes: 1. Used if specified in IA.
A	Highest priority Requested processing priority is the highest.
0031	Acknowledgement request Code determined by the sender for acknowledgement of the interchange.
	Notes: 1. Set = 1 if sender requests acknowledgement, i.e. UNB and UNZ segments received and identified.
1	Requested Acknowledgement is requested.
0035	Test indicator Indication that the interchange is a test.
	Notes: 1. Set = 1 if the interchange is a test. Otherwise not used.

Used Codes

1	Interchange is a test Indicates that the interchange is a test.
5	Interchange is a service provider test Indicates that this interchange is a test with a service provider.
0051	Controlling agency Code to identify the agency controlling the specification, maintenance and publication of the message type.
UN	UN/CEFACT United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT). GS1 Description: UN Economic Commission for Europe (UN/ECE), Committee on the development of trade (TRADE), Working Party on facilitation of international trade procedures (WP.4).
0052	Message version number Version number of a message type. Notes: 1. If UNG/UNE is used, shall be identical in UNG and UNE. The representation of 0052 was specified as n..3 in version 1 of ISO 9735.
D	Draft version/UN/EDIFACT Directory Message approved and issued as a draft message (Valid for directories published after March 1993 and prior to March 1997). Message approved as a standard message (Valid for directories published after March 1997).
0054	Message release number Release number within the current message type version number (0052). Notes: 1. The representation of 0054 was specified as n..3 in version 1 of ISO 9735.
01B	Release 2001 - B Message approved and issued in the second 2001 release of the UNTDID (United Nations Trade Data Interchange Directory).
0057	Association assigned code A code assigned by the association responsible for the design and maintenance of the message type concerned, which further identifies the message.
EAN001	GS1 version control number (GS1 Permanent Code) Indicates that the message is an EANCOM message in version 001.
EAN002	GS1 version control number (GS1 Permanent Code) Indicates that the message is an EANCOM message in version 002.

Used Codes

EAN003	GS1 version control number (GS1 Permanent Code) Indicates that the message is an EANCOM message in version 003.
EAN004	GS1 version control number (GS1 Permanent Code) Indicates that the message is an EANCOM message in version 004.
EAN005	GS1 version control number (GS1 Permanent Code) Indicates that the message is an EANCOM message in version 005.
EAN006	GS1 version control number (GS1 Permanent Code) Indicates that the message is an EANCOM message in version 006.
EAN007	GS1 version control number (GS1 Permanent Code) Indicates that the message is an EANCOM message in version 007.
EAN008	GS1 version control number (GS1 Permanent Code) Indicates that the message is an EANCOM message in version 008.
EAN009	GS1 version control number (GS1 Permanent Code) Indicates that the message is an EANCOM message in version 009.
EAN010	GS1 version control number (GS1 Permanent Code) Indicates that the message is an EANCOM message in version 010.
EAN011	GS1 version control number (GS1 Permanent Code) Indicates that the message is an EANCOM message in version 011.
GDSN23	GDSN version 2.3 (GS1 Permanent Code) Indicates that the message is a Global Data Synchronization Network version 2.3 message.

Example

UNA:+.?'

UNA:+.?'

UNB+UNOA:3+4012345000009:14+4000004000002:14:4000004000099+021013:1043+1
2345555+REF:AA++A+1+EANCOM-DISI+1'

UNB+UNOA:3+5412345678908:14+8798765432106:14+020102:

1000+12345555++++EANCOMREF 52'

UNG+INVOIC+4012385946284:14+4356891275349:14+021013:1040+471123+UN+D:01B
:EAN010+PASSWORT'

UNG+INVOIC+5412345678908:14+8798765432106:14+020102:1000+471123+UN+D:

01B:EAN010'

UNE+1+471123'

UNE+25+471123'

UNZ+1+12345555'

UNZ+5+12345555'
