## **Message Implementation**

# Service Segment Version 3

Rev 2003-04-15

## Swedish Bankers' Association Svenska Bankföreningen

## **Revisions - Service segments**

Date: Changes:

2000-02-01 UNB has been changed:

0008 Address for reverse routing is Optional - by bilateral agreement 0014 Routing address is Optional - by bilateral agreement

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#### 1 The Implementation Instruction and EDIFACT

#### **Publisher**

This implementation instruction is published by the Swedish banking industry's joint EDIFACT organisation:

Swedish Bankers Association Standards Box 7603 103 94 Stockholm Tel.: 08-453 44 00 www.bankforeningen.se

Users and readers of this instruction are invited to send opinions and suggestions to the publisher.

#### **Contents**

The document contains detailed instructions of how the service segments in EDIFACT are used when financial messages are exchanged between institutions/giro institutions and their customers.

The instruction comprises service segments at the transfer level, i.e. UNA, UNB and UNZ. Service segments at the message level are described in their respective message instructions. Functional groups are not used and are thus not described.

Other syntax rules are not described but they accord with EDIFACT ISO 9735 (1988), Revised 1990, Amendment 1 1992.

The data segments are described in the order they appear in the transfer. Each segment is described in the form of a table. An explanation is given of the headings appearing in bold type.

#### Example

#### UNZ INTERCHANGE TRAILER

M

No Description	M/O/N	Format	Remark
0036 INTERCHANGE CONTROL	M	n6	Number of messages in the transfer
COUNT			
0020 INTERCHANGE CONTROL	M	an14	
REFERENCE			

Each data element is separated by a line. In case the data element is a composite data element, composite in brief, the composite is specified on the first line. Thereafter the individual elements of the composite are specified.

#### $\mathbf{M}$

Specifies that the segment is mandatory (M) or optional (O) in the transfer.

#### No

A four-character code specifying the data element's number/reference, e.g. 0036. In those cases where the data element is a composite, the reference of the composite is specified, e.g. S002.

#### **Description**

The name of the element/composite.

#### M/O/N

Specifies one of three conditions:

M=Mandatory, i.e. the segment is mandatory to the transfer

O=Optional, i.e. the element/composite is optional and can be omitted.

N=Not Used, i.e. the element/composite shall not be used.

#### **Format**

The first part specifies the element's type of format. The following types are allowed;

n numerical, i.e. only figures

a alphabetical, i.e. only letters

an alpha-numerical, i.e. both letters and figures.

The second part specifies the length of the element. The following lengths are allowed;

nn fixed length

..nn maximum length.

Ex.: n4 four figures

an..4 up to four figures/letters

#### Remark

Special remarks valid for the element/composite in this instruction.

#### 2 UNA SERVICE STRING

O

No	Description	M/O/N	Format	Remark
	COMPONENT DATA ELEMENT N		an1	Standard value:
	SEPARATOR			
	DATA ELEMENT SEPARATOR	M	an1	Standard value +
	DECIMAL NOTATION	M	an1	Standard value .
	RELEASE INDICATOR	M	an1	Standard value ?
	Reserved for future character use	M		
	SEGMENT TERMINATOR	M	an1	Standard value '

#### Segment Description

Defines the characters that are used as separators and indicators in the subsequent transfer.

#### Segment Rules

#### **UNA**

UNA is optional. When it is used it should be placed first in the transfer, immediately followed by UNB. Is specified in upper-case letters (UNA) immediately followed by the six characters that are specified as separators.

UNA should only be used if separators and indicators differ from the standard values. When UNA is used, all six characters shall be specified, even if only some separators differ from the standard values.

#### Component, Data Element, Separator

Character for separating composite data elements. Standard value is *colon* (:).

#### **Data Element, Separator**

Character for separating single data elements and tags. Standard value is *plus sign* (+).

#### **Decimal Notation**

Character for decimal notation. Standard value is *full stop* (.). Only full stop of comma should be used here.

#### **Release Indicator**

Character for assigning a separating character its normal meaning. Standard value is *question mark* (?). If it shall not appear, a *space* is entered.

#### Reserved for future use

This field is reserved for future use and shall not be used. However, the field must be marked by a *space*.

#### **Segment Terminator**

Character for marking the end of a segment. Standard value is *apostrophe* (')

### Example

UNA:+.? '

UNA specifying the standard value for separators and indicators.

:	Component Data Element Separator	: separates composites in the transfer
+	Data Element Separator	+ separates data elements
•	Decimal Notation	. specifies decimal
?	Release Indicator	? assigns the normal meaning to :+'?
	Reserved for future use	Is marked by a space but has no
		function.
1	Segment Terminator	' terminates a segment

## 3 UNB INTERCHANGE HEADER M

No	Description	M/O/N	Format	Remark
S001	SYNTAX IDENTFIER	M		
0001	Syntax identifier	M	a4	Specifies the syntax being used.
0002	Syntax version number	M	n1	3
		1	1	1
	INTERCHANGE SENDER	M		
	Sender identification	M	an35	Sender's unique identity
0007	Partner identification code qualifier	О	an4	Code for the type of identity specified in data element 0004.
0008	Address for reverse routing	O	an14	By bilateral agreement
		1	1	
	INTERCHANGE RECIPIENT	M		
	Recipient identification	M	an35	Recipient's unique identity
	Partner identification code qualifier	О	an4	Code for the type of identity specified in data element 0010.
0014	Routing address	0	an14	By bilateral agreement
S004	DATE/TIME OF PREPARATION	M		
0017	Date	M	n6	YYMMDD
0019	Time	M	n4	HHMM
0020	INTERCHANGE CONTROL REFERENCE	M	an14	Unique transfer reference. Specified by the sender.
~~~=		1		
	RECIPIENTS REFERENCE, PASSWORD	N		Not used
	Recipient's reference/ password	N	an14	
0025	Recipient's reference/password	N	an2	
	qualifier			
0026	APPLICATION REFERENCE	N	an14	Not used
0020	AFFLICATION REFERENCE	1V	un14	Not used
0029	PROCESSING PRIORITY CODE	N	al	Not used
0021	ACVNOW! EDGEMENT	<b>A</b> 7	1	Netword
0031	ACKNOWLEDGEMENT	N	nI	Not used
	REQUEST			
0032	COMMUNICATIONS	N	an35	Not used
0002	AGREEMENT ID			
		•		•
0035	TEST INDICATOR	О	n1	1
				Flag used to indicate test transfer.

## Segment Description

The segment specifies the sender and recipient of the transfer. A unique transfer reference is also specified here.

#### Segment Rules

UNB is mandatory and marks the beginning of the transfer. UNB is placed first in the transfer, if no UNA is used. If UNA is used, UNB is placed directly after the UNA segment.

#### Syntax identifier (S001)

Identifies the syntax used in the following transfer and the organisation responsible for the syntax.

UNOA	United Nations' A-level syntax.
UNOB	United Nations' B-level syntax.
UNOC	according to ISO 8859-1:1987 (comprises European character sets)
UNOD	according to ISO 8859-2:1987
UNOE	according to ISO 8859-5
UNOF	according to ISO 8859-7

Syntax classes within ISO 9735 comprise character sets (graphical characters) on the one hand, and character representations (the graphical characters' bit-representation) on the other hand. The Swedish Bankers Association has therefore chosen to specify character sets and character representations separately in each syntax class.

#### Syntax class UNOC

Comprises, as standard, the whole character set in ISO 8859-1. Today, it is not possible to handle all the characters in this comprehensive standard, and all existing characters are not translatable to different character representations. The Swedish Bankers Association has therefore limited the character set in order to obtain translatability. This limitation takes 8-bit representations and EBCDIC into account. However, for a certain time, this character set may be too comprehensive if translatability to 7-bit code is to be possible (see the sections Character Sets and Character Representations).

The syntax class/character set and the character representation that is to be used shall be evident from the agreement between the financial institution and the customer.

#### Syntax identifier (0001)

Identification of the syntax. The Swedish Bankers Association recommends UNOC.

#### Syntax version number (0002)

Specification of which version of the syntax in 0001 that is being used. The Swedish Bankers Association recommends code 3, which refers to ISO 9735 version 3.

#### **Interchange sender (S002)**

Here the sender's identity is specified. The Swedish Bankers Association recommends that the Sender is specified in coded form.

#### Sender identification (0004)

The sender's identity. In communications between a business and a financial institution, the company registration number according to ISO 6523 is used. In communications between financial institutions, the SWIFT address is used.

#### Partner identification code qualifier (0007)

When the sender has been specified by means of a code, the code list used is specified here. The following codes may be used;

Code	Signification
14	EAN code
30	Company registration number according to ISO 6523
55	Identity of Financial Institution (SWIFT address)

#### Address for reverse routing (0008)

Not used.

#### **Interchange recipient (S003)**

Here the recipient's identity is specified. The Swedish Bankers Association recommends that the Recipient is specified in coded form.

#### **Recipient identification (0010)**

The recipient's identity. In communications between a business and a financial institution, the company registration number according to ISO 6523 is used. In communications between financial institutions, the SWIFT address is used.

#### Partner identification code qualifier (0007)

When the recipient has been specified by means of a code, the code list used is specified here. The following codes may be used;

Code	Signification
14	EAN code
30	Company registration number according to ISO 6523
55	Identity of Financial Institution (SWIFT address)

#### Routing address (0014)

Not used.

#### **Date/time of preparation (S004)**

Date and time when the transfer was issued. N.B.: This date/time may differ from the dates and times that are specified in each message, as well as from when the transfer actually was executed.

#### **Date (0017)**

Date when the transfer was issued. Date is always specified in the form YYMMDD.

#### Time (0019)

Time when the transfer was issued. Time is always specified in the form HHMM.

#### **Interchange control reference (0020)**

Unique reference for the transfer, specified by the sender. This reference is also found in UNZ, element 2. The reference, which is the same for UNB as for UNZ, is among other things used to verify that the transfer is complete.

#### Recipients reference, password (S005)

Not used.

#### Recipient's reference/ password (0022)

Not used.

#### Recipient's reference/ password qualifier (0025)

Not used.

#### **Application reference (0026)**

Not used.

#### **Processing priority code (0029)**

Not used.

#### Acknowledgement request (0031)

Not used.

#### Communications agreement id (0032)

Not used.

#### Test indicator (0035)

There is a possibility to indicate that a transfer is a test transfer only by specifying code 1. When this element is used, it means that all messages in the transfer are test messages.

Standard value: If the element is missing, this automatically means that the transfer is not a test transfer.

## Example

UNB+UNOC: 3+00075660473456: 30+00075867995678: 30+990130: 1045+223344'

UNOC:3	Syntax identification	Organisation responsible and syntax is UNOC i.e. ISO 8859-1. Version number is 3.
00075660473456:30	Sender of the transfer	Company registration number 566047-3456 is the sender
00075867995678:30	Recipient of the transfer	Company registration number 586799-5678 is the recipient
990130:1045	Date/time of issue	The transfer was issued 30 January 1999 at 10.45 hours.
223344	Transfer reference	The unique reference of the transfer is 223344

#### 4 UNZ INTERCHANGE TRAILER

M

No	Description	M/O/N	Format	Remark
0036	INTERCHANGE CONTROL	M	n6 Number of messages in the transfer	
	COUNT			-
0020	INTERCHANGE CONTROL	M	an14	The unique reference of the transfer,
	REFERENCE			specified by the sender. Same as the one
				specified 0020 in UNB for the relevant
				transfer.

#### Segment Description

Specification of the end of the transfer, containing the total number of messages and the same reference number as in the transfer heading (the UNB segment).

#### Segment Rules

#### **UNZ**

UNZ is always placed last in the transfer.

#### **Interchange control count (0032)**

Specification of the total number of messages in the transfer.

### **Interchange control reference (0020)**

This reference number is identical to the reference number in UNB (0020).

#### Example

UNZ+20+223344'

20	Number of messages	In this transfer there are 20
		messages.
223344	Reference number	Transfer's reference number

#### 5 CHARACTER SETS

#### **Syntax class UNOC**

Figures: 0123456789

Space:

Upper cases: ABCDEFGHIJKLMNOPQRSTUVWXYZ

Special characters I: ! " % & '() \* +, - . /:; < = > ? Lower cases: abcdefghijklmnopqrstuvwxyz

Country-specific upper cases I: ÄÅÉÖÜ Country-specific lower cases I: äåéöü Special characters II: #\$

Country-specific upper cases II: ÀÁÂÃÆÇÈÊËÌÍÎÏÑÒÓÔÕØÙÚÛß

Country-specific lower cases II: àáâãæçèêëìíîïñòóôõøùúûÿ

Special characters III: @ [\] {|}  $\phi \pounds \Psi \& \text{"} \gg \frac{1}{4} \frac{1}{2} \frac{3}{4} i$ 

In case this character set is considered to be too comprehensive, a smaller character set that excludes lines 9-11 shall be used. The smaller character set then looks like this.

Figures: 0123456789

Space:

Upper cases: ABCDEFGHIJKLMNOPQRSTUVWXYZ

Special characters I: ! " % & '() \* +, - . /:; < = > ? Lower cases: abcdefghijklmnopqrstuvwxyz

Country-specific upper cases I: ÄÅÉÖÜ Country-specific lower cases I: äåéöü Special characters II: #\$\_

#### 6 CHARACTER REPRESENTATIONS

Acceptable character representations are:

ISO 8859-1 8-bit ASCII code.

ISO 646 7-bit ASCII code. The standard is however not unambiguous as regards two

characters, and ten characters are reserved for country-specific characters. The \$-character can be substituted for the ¤-character, and # can be substituted for £. In order to obtain a good match with 8-bit ASCII it is assumed that \$ and # are

not substituted.

Taking frequently appearing representations into account, the following are also accepted:

Code Page 850 8-bit ASCII code.

EBCDIC Swedish/Finnish.

#### **Syntax class UNOC**

According to 8859-1

	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0	SP	0	@	P		p				0	À		à	
-1	!	1	A	Q	a	q			i		Á	Ñ	á	ñ
-2	"	2	В	R	b	r			¢		Â	Ó	â	ó
-3	#	3	С	S	c	S			£		Ã	Ó	ã	ó
-4	\$	4	D	T	d	t					Ä	Ô	ä	ô
-5	%	5	Е	U	e	u			¥		Å	Õ	å	õ
-6	&	6	F	V	f	V				9	Æ	Ö	æ	ö
-7	•	7	G	W	g	W			§	••	Ç		ç	
-8	(	8	Н	X	h	X					È	Ø	è	ø
-9	)	9	I	Y	i	у					É	Ù	é	ù
-A	*	:	J	Z	j	Z					Ê	Ú	ê	ú
-B	+	;	K	[	k	{			«	<b>»</b>	Ë	Û	ë	û
-C	,	<	L	\	1				Г	1/4	Ì	Ü	ì	ü
-D	ı	=	M	]	m	}				1/2	Í		í	
-E		>	N		n					3/4	Î		î	
-F	/	?	0	_	0					i	Ϊ	ß	ï	ÿ

## Syntax class UNOC

According to Code Page 850

	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0	SP	0	@	P		p	Ç	É	á				Ó	
-1	!	1	A	Q	a	q	ü	æ	í				ß	
-2	"	2	В	R	b	r	é	Æ	ó			Ê	Ô	
-3	#	3	C	S	c	S	â	ô	ú			Ë	Ò	3/4
-4	\$	4	D	T	d	t	ä	ö	ñ			È	õ	$\P$
-5	%	5	Е	U	e	u	à	ò	Ñ	Á			Õ	§
-6	&	6	F	V	f	v	å	û		Â	ã	Í		
-7	'	7	G	W	g	W	ç	ù		À	Ã	Î		
-8	(	8	Н	X	h	X	ê	ÿ	i			Ϊ		0
-9	)	9	I	Y	i	у	ë	Ö					Ú	
-A	*	:	J	Z	j	Z	è	Ü	Г				Û	••
-B	+	;	K	[	k	{	ï	ø	1/2				Ù	
-C	,	<	L	\	1		î	£	1/4					
-D	-	=	M	]	m	}	ì	Ø	i	¢				
-E		>	N		n		Ä		«	¥		Ì		
-F	/	?	0	_	0		Å		<b>»</b>					

## Syntax class UNOC

According to EBCDIC

	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0	SP	&	1	ø	Ø	0		¢	ä	å	É	0
-1			/	\	a	j	ü	£	A	J		1
-2	â	ê	Â	Ê	b	k	S	¥	В	K	S	2
-3	{	ë	#	Ë	c	1	t		С	L	T	3
-4	à	è	À	È	d	m	u		D	M	U	4
-5	á	í	Á	Í	e	n	V	[	Е	N	V	5
-6	ã	î	Ã	Î	f	0	W	9	F	0	W	6
-7	}	ï	\$	Ϊ	g	p	X	1/4	G	P	X	7
-8	ç	ì	Ç	Ì	h	q	у	1/2	Н	Q	Y	8
-9	ñ	ß	Ñ	é	i	r	Z	3/4	I	R	Z	9
-A	§	]	ö	:	«		i					
-B		Å	,	Ä	<b>»</b>		i		ô	û	Ô	Û
-C	<	*	%	Ö		æ					@	Ü
-D	(	)		1					ò	ù	Ò	Ù
-E	+	;	>	=		Æ			ó	ú	Ó	Ú
-F	!	7	?	"					õ	ÿ	Õ	

## $Syntax\ class\ UNOC-less\ comprehensive\ alternative$

According to 8859-1

	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0	SP	0		P		p								
-1	!	1	A	Q	a	q								
-2	"	2	В	R	b	r								
-3	#	3	C	S	c	S								
-4	\$	4	D	T	d	t					Ä		ä	
-5	%	5	Е	U	e	u					Å		å	
-6	&	6	F	V	f	v						Ö		ö
-7	,	7	G	W	g	W								
-8	(	8	Н	X	h	X								
-9	)	9	I	Y	i	у					É		é	
-A	*	:	J	Z	j	Z								
-B	+	;	K		k									
-C	,	<	L		1							Ü		ü
-D	-	=	M		m									
-E		>	N		n									
-F	/	?	0	_	0									

## Syntax class UNOC - less comprehensive alternative

According to Code Page 850

	2-	3-	4-	5-	6-	7-	8-	9-
-0	SP	0		P		p		É
-1	!	1	A	Q	a	q	ü	
-2	"	2	В	R	b	r	é	
-3	#	3	С	S	С	S		
-4	\$	4	D	T	d	t	ä	ö
-5	%	5	Е	U	e	u		
-6	&	6	F	V	f	V	å	
-7	•	7	G	W	g	W		
-8	(	8	Н	X	h	X		
-9	)	9	I	Y	i	у		Ö
-A	*	:	J	Z	j	Z		Ü
-B	+	;	K		k			
-C	,	<	L		1			
-D	-	=	M		m			
-E		>	N		n		Ä	
-F	/	?	О		О		Å	

## Syntax class UNOC - less comprehensive alternative

According to ISO 646

	2-	3-	4-	5-	6-	7-
-0	SP	0	É	P	é	p
-1		1	A	Q	a	q
-2	=	2	В	R	b	r
-3	#	3	C	S	С	S
-3 -4 -5	\$	4	D	T	d	t
-5	%	5	Е	U	e	u
-6	&	6	F	V	f	V
-7	•	7	G	W	g	W
-8	(	8	Н	X	h	X
-9	)	9	I	Y	i	у
-A -B -C	*	:	J	Z	j	Z
-B	+	;	K	Ä	k	ä
-C	,	<	L	Ö	1	ö
-D	-	=	M	Å	m	å
-E -F		>	N	Ü	n	ü
-F	/	?	О		0	

## Syntax class UNOC - less comprehensive alternative

According to EBCDIC

	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0	SP	&	-						ä	å	É	0
-1			/		a	j	ü		A	J		1
-2					b	k	S		В	K	S	2
-3			#		С	1	t		С	L	T	3
-4					d	m	u		D	M	U	4
-5					e	n	V		Е	N	V	5
-6					f	0	W		F	0	W	6
-7			\$		g	p	X		G	P	X	7
-8					h	q	у		Н	Q	Y	8
-9				é	i	r	Z		I	R	Z	9
-A			ö	:								
-B		Å	,	Ä								
-C	<	*	%	Ö								Û
-D	(	)		1								
-E	+	;	>	=								
-F	!		?	"								