

PROTECT Guide Version 2.0

PART VI

EDIFACT Message Envelope segments Recommendations

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Document Version Control

Version	Date	Release note (and description of change)
1.0	October 21, 2003	Informal draft version
2.0	June 8, 2004	First formal version for implementation
2.0	March 17, 2005	Editorial changes (front page)

1 Introduction

This document contains a recommendation for the use of the EDIFACT message enveloping segments (also known as the UN/EDIFACT Service segments), as contained in the UN/EDIFACT Syntax Rules of the UN/EDIFACT Draft Directory.

The EDIFACT Service segments used are:

- UNB and UNT – the interchange header and trailer segments;
- UNG and UNE – the functional group header and trailer segments.

It further contains some recommendation on certain aspects of the syntax.

The EDIFACT Message implementation guides, as contained in the other Parts to the PROTECT Guide, also adhere to the UN/EDIFACT Draft Directory and Syntax Rules.

2 References

The UN/EDIFACT Draft Directories and Syntax Rules are published by the UN/CEFACT organisation. The UN/CEFACT organisation is the United Nations Centre for Trade Facilitation and Electronic Business.

The EDIFACT Message implementation guides, as contained in the other Parts to the PROTECT Guide, are based on the *UN/EDIFACT Draft Directory D.2003A* as published in the *United Nations Trade Data Interchange Directory* (UNTDID).

- The following interdependent documents, which are included in the *UN/EDIFACT Draft directory*, are required in order to interpret, understand and use EDIFACT messages:
 1. *UN/EDIFACT Syntax Rules* (ISO 9735), which define in concise form the standard for formatting data elements and segments into messages (Part 4, section 2.2 of UNTDID).
 2. *UN/EDIFACT Syntax Implementation Guidelines*, which expand on some of the details of the syntax rules (Part 4, section 2.3 of UNTDID).
 3. *UN/ECE UNSM (United Nations Standard Message)- General Introduction to UNSM descriptions Section 2*, which explains terms and gives definitions used in the EDIFACT standard (Part 4, section 2.6 of UNTDID).

These documents can be downloaded from the web site of the United Nations:

<http://www.unece.org/trade/untidid/texts/unredi.htm>

- The message specifications are also based on the Principles & Rules for the Implementation of Transport EDI messages for IFTDGN and APERAK, published by ITIGG.

3 Interchange Structure

According to the EDIFACT Syntax Rules an interchange file consists of:

	Service String Advice	UNA	Conditional (not used)
	Interchange Header	UNB	Mandatory
	Functional Group Header	UNG	Conditional
	Message Header	UNH	Mandatory
	User Data Segments		As required
	Message Trailer	UNT	Mandatory
	Functional Group Trailer	UNE	Conditional
	Interchange Trailer	UNZ	Mandatory

The Service String Advice, UNA, and the service segments UNB to UNZ shall appear in the stated order in an interchange.

A message begins with a Message Header segment UNH and ends with a Message trailer segment UNT and contains user data segments. The messages are specified in the separate Parts to the PROTECT Guide, i.e. the EDIFACT Message Implementation Guides.

There may be either only functional group(s) or only message(s) within an interchange and there may be one or several messages in a functional group.

The structures for Service segments and the use for data elements therein are specified in the next chapter.

3.1 Service String Advice UNA

To be able to separate the data elements in the segments of the message in an actual interchange delimiters (or information separators) are used.

It is recommended that the Service String Advice, UNA, is not used. As a consequence the default delimiters of the character set used (Level A or Level B) are applicable.

The delimiters used in case of Level A Character Set are specified in chapter 5 of the UN/EDIFACT Syntax rules, as follows:

Character name	Symbol	Reserved for use as:
Apostrophe	'	segment terminator
Plus sign	+	segment tag and data element separator
Colon	:	component data element separator
Question mark	?	release character
		? immediately preceding one of the characters ' + : ? restores their normal meaning.
		E.g. 10?+10=20 means 10+10=20.
		A question mark is represented by ??.

3.2 EDIFACT Syntax version

ISO-9735 Syntax versions that are suitable for the exchange of the PROTECT messages are version 2 and 3.

Version 4 of the syntax supports additional functionality and features, such the possibility to repeat data elements. The new features have not been used in the PROTECT messages. So, there is no requirement for using version 4.

Note:

It is noted that the recommendation to use ISO-9735 Syntax version 4, as presented in the previous version of the PROTECT Guide, has now been deleted.

Under the heading of **Millennium-proof** message exchange it was recommended to avoid the risk of problems in EDI that could be caused by the Year 2000. Using ISO-9735 syntax version 4 provides in UNB and UNG segments a date field (0017) in the format of n8, to allow the century to be included (e.g. 20000102, for January 2, 2000).

The UNH segment of syntax version 4, however, is upwards compatible with the UNH segment as documented for the versions 2 and 3.

The need for the recommendation is no longer present. All ports continued using the versions 2 and 3 of the syntax without experiencing any problems.

4 Envelope Segments (Service Segments)

Segment: **UNB** Interchange Header
Position: 0010
Group:
Level: 0
Usage: Mandatory
Max Use: 1
Purpose: To start, identify and specify an interchange
Dependency Notes:

Data Element Summary				
Data Element	Component Element	Name	Base Attributes	User Attributes
S001	0001	SYNTAX IDENTIFIER	M	1
		Identification of the agency controlling the syntax and indication of syntax level.		M
		Syntax identifier	M	a4
		Coded identification of the agency controlling a syntax and syntax level used in an interchange.		M
	UNOA	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.		
	UNOB	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.		
	UNOC	UN/ECE level C		
S002	0002	Syntax version number	M	n1
		Version number of the syntax identified in the syntax identifier (0001).		M
		2		
		Version 2		
	3	ISO 9735:1990.		
		Version 3		
		ISO 9735 Amendment 1:1992.		
	0004	INTERCHANGE SENDER	M	1
		Identification of the sender of the interchange.		M
		Sender identification	M	an..35
S003	0007	Name or coded representation of the sender of a data interchange.		
		<i>Bilateral agreed code.</i>		
	0008	Partner identification code qualifier	C	an..4
		Qualifier referring to the source of codes for the identifiers of interchanging partners.		O
		<i>Bilateral agreed code.</i>		
	0010	Address for reverse routing	C	an..14
		Address specified by the sender of an interchange to be included by the recipient in the response interchanges to facilitate internal routing.		X
	0010	INTERCHANGE RECIPIENT	M	1
		Identification of the recipient of the interchange.		M
		Recipient identification	M	an..35
	0010	Name or coded representation of the recipient of a data interchange.		M
		<i>Bilateral agreed code.</i>		

0007	Partner identification code qualifier	C	an..4	O	
	Qualifier referring to the source of codes for the identifiers of interchanging partners.				
	<i>Bilateral agreed code.</i>				
0014	Routing address	C	an..14	X	
	Address specified by the recipient of an interchange to be included by the sender and used by the recipient for routing of received interchanges inside his organization.				
S004	DATE AND TIME OF PREPARATION	M	1	M	
	Date and time of preparation of the interchange.				
0017	Date of preparation	M	n6	M	
	Local date when an interchange or a functional group was prepared.				
	<i>Format: YYMMDD.</i>				
0019	Time of preparation	M	n4	M	
	Local time of day when an interchange or a functional group was prepared.				
	<i>Format: HHMM.</i>				
0020	INTERCHANGE CONTROL REFERENCE	M	1 an..14	M	
	Unique reference assigned by the sender to an interchange.				
S005	RECIPIENTS REFERENCE PASSWORD	C	1	X	
	Reference or password as agreed between the communicating partners.				
0022	Recipient reference/password	M	an..14	X	
	Unique reference assigned by the recipient to the data interchange or a password to the recipient's system or to a third party network as specified in the partners interchange agreement.				
0025	Recipient reference/password qualifier	C	an2	X	
	Qualifier for the recipient's reference or password.				
0026	APPLICATION REFERENCE	C	1 an..14	X	
	Identification of the application area assigned by the sender, to which the messages in the interchange relate e.g. the message identifier if all the messages in the interchange are of the same type.				
0029	PROCESSING PRIORITY CODE	C	1 a1	X	
	Code determined by the sender requesting processing priority for the interchange.				
0031	ACKNOWLEDGEMENT REQUEST	C	1 n1	X	
	Code determined by the sender for acknowledgement of the interchange.				
0032	COMMUNICATIONS AGREEMENT ID	C	1 an..35	X	
	Identification by name or code of the type of agreement under which the interchange takes place.				
0035	TEST INDICATOR	C	1 n1	X	
	Indication that the interchange is a test.				

Segment: **UNG** Functional Group Header
Position: 0060
Group:
Level: 0
Usage: Conditional (Optional)
Max Use: 1
Purpose: To head, identify and specify a Functional Group
Dependency Notes:

Data Element Summary					
Data Element	Component Element	Name	Base Attributes	User Attributes	
0038		FUNCTIONAL GROUP IDENTIFICATION	M 1 an..6	M	
		Identification of the one type of messages in a functional group.			
		<i>APERAK</i> Application error and acknowledgement message			
		<i>BERMAN</i> Berth management message			
		<i>IFTDGN</i> Dangerous goods notification message			
		<i>WASDIS</i> Waste disposal information message			
S006		APPLICATION SENDER IDENTIFICATION	M 1	M	
		Identification of the sender's division, department etc. from which a group of messages is sent.			
	0040	Application sender identification	M an..35	M	
		Name or code identifying the originating division, department etc. within the sender's organization.			
	0007	Partner identification code qualifier	C an..4	O	
		Qualifier referring to the source of codes for the identifiers of interchanging partners.			
		<i>Bilateral agreed code.</i>			
S007		APPLICATION RECIPIENTS IDENTIFICATION	M 1	M	
		Identification of the recipient's division, department etc. for which a group of messages is intended.			
	0044	Application recipient's identification	M an..35	M	
		Name or code identifying the division, department etc. within the recipient's organization for which the group of messages is intended.			
	0007	Partner identification code qualifier	C an..4	O	
		Qualifier referring to the source of codes for the identifiers of interchanging partners.			
		<i>Bilateral agreed code.</i>			
S004		DATE AND TIME OF PREPARATION	M 1	M	
		Date and time of preparation of the interchange.			
	0017	Date of preparation	M n6	M	
		Local date when an interchange or a functional group was prepared.			
		<i>Format: YYMMDD.</i>			
	0019	Time of preparation	M n4	M	
		Local time of day when an interchange or a functional group was prepared.			
		<i>Format: HHMM.</i>			
0048		FUNCTIONAL GROUP REFERENCE NUMBER	M 1 an..14	M	
		Reference number for the functional group assigned by and unique within the sender's division, department etc.			
0051		CONTROLLING AGENCY	M 1 an..2	M	
		Code identifying the agency controlling the specification, maintenance and publication of the message type.			
		<i>UN</i> <i>UN/ECE/TRADE/WP.4</i>			
		<i>United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT).</i>			
S008		MESSAGE VERSION	M 1	M	
		Specification of the type of messages in the functional group.			
	0052	Message type version number	M an..3	M	

Version number of a message type.

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 type release number M an..3 M

Release number within the current message type version number (0052).

03A

Release 2003 - A

Message approved and issued in the first 2003 release of the UNTDID (United Nations Trade Data Interchange Directory).

0057 Association assigned code C an..6 O

Code, assigned by the association responsible for the design and maintenance of the message type concerned, which further identifies the message.

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0058 APPLICATION PASSWORD C 1 an..14 X

Password to the recipient's division, department or sectional system.

Segment: **UNE** Functional Group Trailer
Position: 0100
Group:
Level: 0
Usage: Conditional (Dependent)
Max Use: 1
Purpose: To end and check the completeness of a Functional Group
Dependency Notes:

Data Element Summary

<u>Data Element</u>	<u>Component Element</u>	<u>Name</u>	<u>Base Attributes</u>	<u>User Attributes</u>
0060		NUMBER OF MESSAGES A count of the number of messages in a functional group.	M 1 n..6	M
0048		FUNCTIONAL GROUP REFERENCE NUMBER Reference number for the functional group assigned by and unique within the sender's division, department etc. <i>This reference should be the same as in the UNG segment.</i>	M 1 an..14	M

Segment: **UNZ** Interchange Trailer
Position: 0110
Group:
Level: 0
Usage: Mandatory
Max Use: 1
Purpose: To end and check the completeness of an interchange
Dependency Notes:

Data Element Summary

<u>Data Element</u>	<u>Component Element</u>	<u>Name</u>	<u>Base Attributes</u>	<u>User Attributes</u>
0036		INTERCHANGE CONTROL COUNT Count either of the number of messages or, if used, of the number of functional groups in an interchange.	M 1 n..6	M
0020		INTERCHANGE CONTROL REFERENCE Unique reference assigned by the sender to an interchange. <i>This reference should be the same as in the UNB segment.</i>	M 1 an..14	M