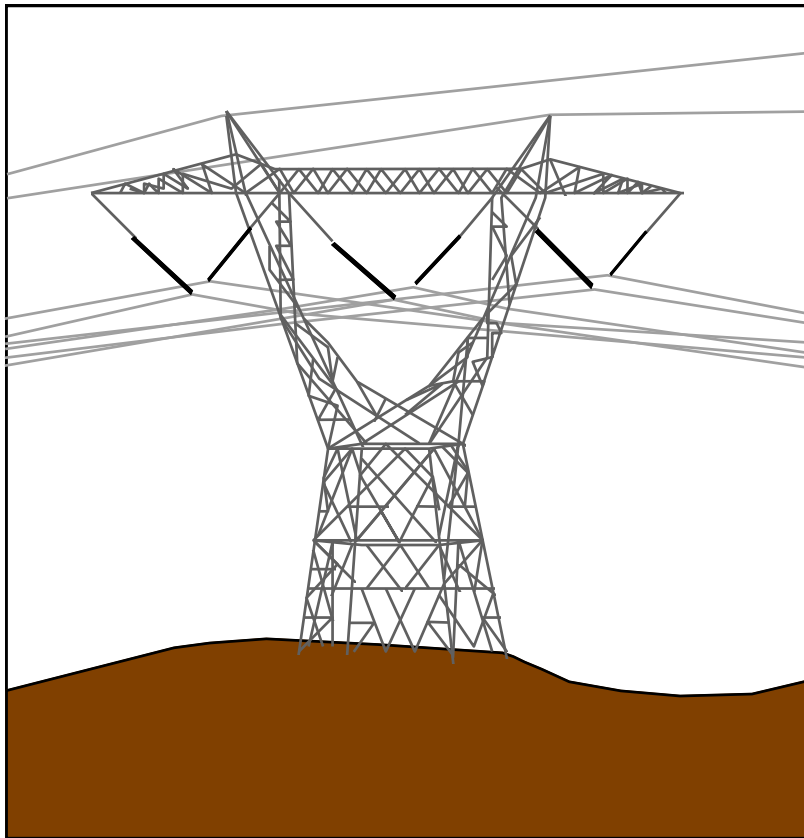


Message handbook for Ediel

Implementation guide for Delivery schedule message



EDIFACT-message:	Extended DELFOR
EDIFACT-version:	D
EDIFACT-release:	96A
IG-status:	For implementation
IG-version:	2.4
IG-revision:	B
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1. INTRODUCTION

This document is an Implementation Guide (IG) for the delivery schedule message, to be used in the power industry. The IG describes the EDIFACT-message DELFOR (Delivery schedule) in detail. The message is sent between parties in the power industry and is used for power delivery (fixed delivery) and frequency adjustment.

Note: The message type used for the Delivery Schedule message is expanded in comparison to the standard EDIFACT UNSM message DELFOR, with an extra CUX-segment in segment group 8.

This IG is a part of the "Message handbook for Ediel", which contains a set of IG's for different messages used in the power industry and a functional description, which contains common descriptions for the different IG's. In the future several new IG's are planned.

In addition a Functional description is available, which contains common descriptions for the different Implementation Guides. This includes relationships between the different message types, use of codes and code lists, special conditions between countries (such as use of time zones), terms and notation, use of header and trailer segments (UNB and UNZ) etc.

2. GENERAL DESCRIPTION OF THE «DELIVERY SCHEDULE MESSAGE»

2.1. Delivery schedule message

The message type used for the Delivery schedule is based upon the EDIFACT message DELFOR. The EDIFACT standard message is expanded with a CUX-segment in segment group 8, and segment group 12 is extended from a maximum of 200 occurrences to 999 occurrences. The standard UNSM was extended to 999 repetitions (SG 18) from D.96B.

2.2. Functional Definition

The Delivery schedule is a message between parties in the power industry giving product requirements regarding details for short term delivery instructions and/or medium to long term product/service forecast for planning purposes according to conditions set out in a contract or order.

2.3. Principles

The delivery schedule message is used to:

- Specify delivery schedules requested by one party.
- Define the aspects that guarantee a perfect synchronisation between the parties.
- Provide information allowing one party to plan for future requirements in order to produce and deliver power in the most economical way.

The information is transferred as:

- General information
- Description of the serial Id.
- Information of the quantity and time period

3. REFERENCES

This Implementation guide is based on the following documents.

- [1] **Norsk veiledning i bruk av EDIFACT**, version 2.0, November 1991 with addition of January 1994.
- [2] **UN/EDIFACT Draft directory**, D.96A
- [3] **Message handbook for Ediel, Functional description**
- [4] **ISO 9735**, version 2, 1990.11.01

3.1. Precedence

If there should be any conflict regarding this Implementation guide or between this Implementation guide and other documents, the following precedence shall be used:

- 1 UN/EDIFACT Draft directory, D.96A [2]
- 2 The Functional description [3]
- 3 This Implementation guide.

In this Implementation guide the EDIFACT message type is described in different ways. If there should be any conflict regarding the different descriptions, the detailed description in the last chapter should be used.

4. QUALITY ASSURANCE

This document is written by EdiSys AS on behalf of Ediel. Members of the Ediel-organisation have taken part in its development throughout.

4.1. Version number

The Implementation Guide will have 2 levels of version numbering. This will be Version and Release. In addition there will be a Revision number.

- The Version number (first number) will be updated when there have been major changes like new versions of the message type.
- The Release number will be updated when there have been small changes to the IG, like adding new segments, new data elements etc. within the EDIFACT directory. These changes shall not influence existing implementations.
- The Revision number will be updated when there have been minor changes, like correction of examples, adding new codes etc. These changes shall not influence existing implementations.

4.2. Corrections from earlier versions

In addition to minor text corrections the following changes have been made to this version of the IG:

Corrections from version 2.4.A:

- The code Z15, kWh/m³ is added to SG8/MEA.

Corrections from version 2.3.H:

- The currencies FIM, DEM and NLG are removed.
- It is opened for the usage of UNH/0068 (COMMON ACCESS REFERENCE).
- The code “DK, Danish Ediel group” is added as code list responsible in all relevant segments where code list responsables are used.
- The code “305, ETSO (European Transmission System Operator)” is added as code list responsible together with EAN, where relevant.
- The usage of data element UNH/S009 0057 is changed. It is now possible to add a version number of the relevant national user guide.

Corrections from version 2.3.G:

- The code “DK, Danish Ediel group” is added to LOC and LIN.
- A reference to “ISO 3166-1 two alpha country code“ is added to NAD.

Corrections from version 2.3.F:

- The code “346, Number of units” is added to QTY.

Corrections from version 2.3.E:

- The data element “Direction” was suggest removed from SG4/LOC. - *Withdrawn*

Corrections from version 2.3.D:

- A reference to the Functional description regarding generic product codes is added to the LIN segment.

Corrections from version 2.3.C:

- Segment group 12 is extended from a maximum of 200 occurrences to 999 occurrences.

Corrections from version 2.3.B:

- The codes A97 and MQH are added to MEA/SG8.

Corrections from version 2.3.A:

- A comment is added to the MEA segment in SG8 stating that the measure unit qualifiers MWh/h, kWh/h, MVarh/h and kVarh/h not should be used in new applications.

Corrections from version 2.2.5:

- DE, NL and GB are added as country codes in the NAD segment.
- Some general paragraphs from chapter 1 are removed. This information will be found in the Functional description.
- The text in chapter 4.1, Version number, is changed to be more compliant with practice.
- The classification of data element 1225 in BGM is changed from “R” to “O”.
- The code Z11, Z12, Z13 and Z14 are removed from MEA/SG8.
- The codes D54 – Global solar radiation and LTR - Litre are added to segment MEA/SG8.

Corrections from version 2.2.4:

- The code “EKS Elkraft” has been added to the LOC segments in segment group 4 and to the LIN segment in segment group 8.
- The code “XEU - European Monetary Coop. Fund, (Euro)” is changed to “EUR - Euro” in the CUX segment. The CUX segment is still planned removed in the next version of Ediel IG’s.

Corrections from version 2.2.3:

- The code “XEU - European Monetary Coop. Fund, (Euro)” is added to the CUX segment. The CUX segment is still planned removed in the next version of Ediel IG’s.

Corrections from version 2.2.2:

- Only text corrections.

Corrections from version 2.2.1:

- The code P1 for percent is added to the MEA segment in SG 8.

Corrections from version 2.1.0 and 2.2.0:

- The code “ELT” for Eltra and the code “9” for EAN are added in several segments as code list responsible agencies.
- The segment MEA in SG 8 is planned to be removed in the next version of the Ediel IG. The “Measure unit” will then be moved to the QTY segment in SG 12.
- The segment CUX in SG 8 is planned to be removed in the next version of the Ediel IG.

- The codes K3, KVR, Z11, Z12, Z13, Z14 and Z15 are added to the MEA segment in SG 8.
- The codes Z01, Z02, Z04, Z11, Z12, Z13 and Z15 will probably be removed as measure unit codes in the next version of the Ediel IG's.

Corrections from version 2.0.0:

- The “method B” used for defining time period is no longer valid. The processing period is split into start, stop and time zone. The codes ZZA and ZZB in the DTM segment in segment group 0 are removed and replaced by the codes 163, 164 and ZZZ.
- The code “ZZZ” in the NAD segment in segment group 4 is replaced by the code “XX”.
- The code “ZZZ” in the MEA segment in segment group 8 is replaced by the code “Z10”.
- The code “Z03” is added to the QTY segment in segment group 12.
- The codes “Z10” and “Z24” are removed from the DTM segment in segment group 12.

Main corrections from version 1.x.x:

- The Message version is updated to version D.96A.
- The Association assigned code in UNH is changed from EDIEL to EDIEL2
- The NAD segment in segment group 2 is extended with 1 party qualifier. The segment can be repeated 4 times.
- The LOC segment in segment group 4 is changed and has now the same layout as in MSCONS.

5. SPECIAL CONDITIONS

5.1. Use of the MEA and CUX segments in segment group 8

The following rules apply to the use of the MEA and CUX segments in segment group 8:

- If the MEA and CUX segments are *not* used the values reported should be MWh/h.
- If both the MEA and CUX segments are used the values reported should be «Currency/measure unit» (i. e. SEK/MWh).
- If data element C174 6411 in the MEA segment has the code «Z10» the values reported should be prices or amounts with Currency defined in the CUX segment.
- If only the CUX segment is used the values reported should be Currency/MWh/h.

6. OVERVIEW OF THE MESSAGE

6.1. Data model for the Delivery schedule message

Shown below is a data model for the delivery schedule message:

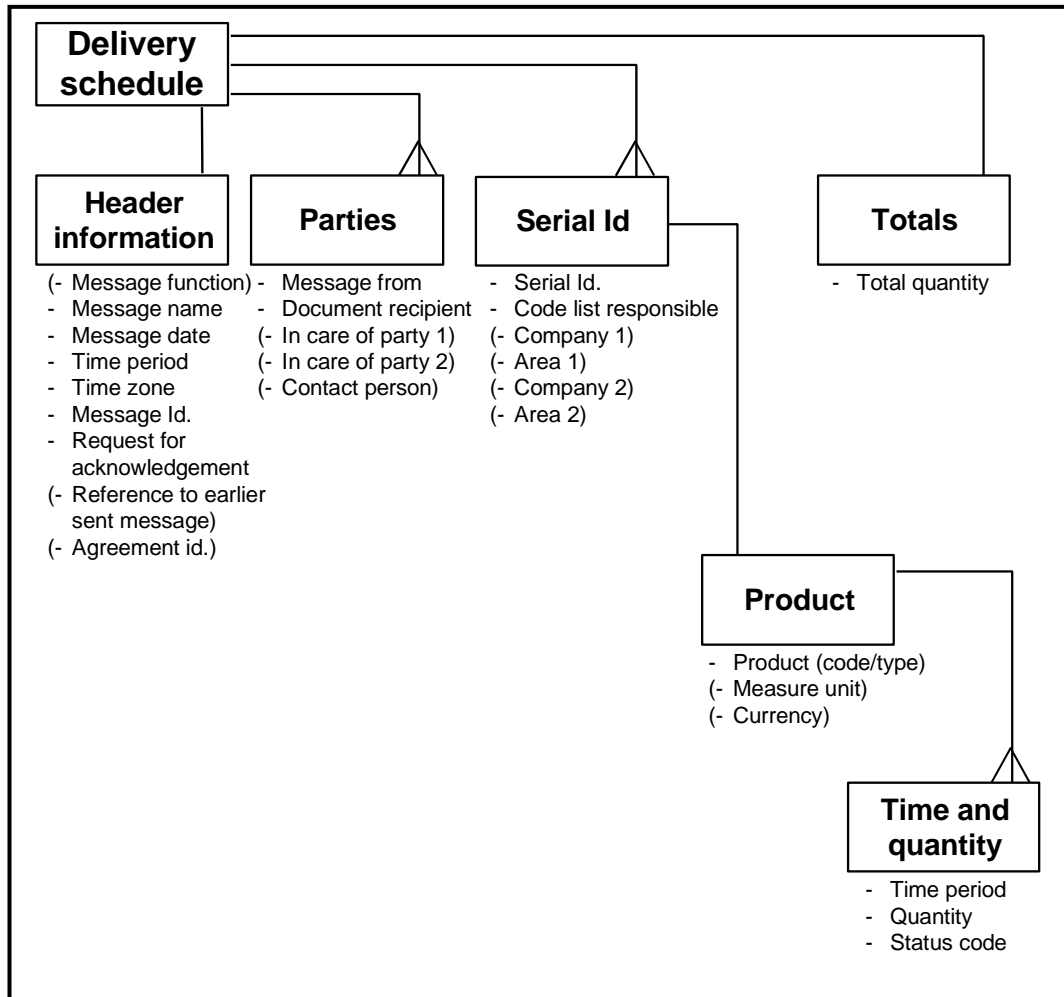


Figure 2 Data model for delivery schedule

The Attributes in parentheses are conditional attributes and are not necessarily transferred.

6.2. Cue list

Below is shown a table describing the EDIFACT message and the relationships to the attributes in the data model.

Note: The message type used for the Delivery Schedule message is expanded in comparison to the standard EDIFACT UNSM message DELFOR, with an extra CUX-segment in segment group 8.

General information about the message			
UNH	M	1	Message reference Message type
BGM	M	1	Message name Message Id. (Message function) Request for acknowledgement
DTM	M	4	Message date Time period start Time period stop Time zone
References			
SG 1	O	2	
RFF	M	1	(Reference to earlier sent message) (Agreement Id.)
Parties			
SG 2	R	4	
NAD	M	1	Message from Document recipient (In care of party 1) (In care of party 2)
Contact person			
SG 3	O	1	
CTA	M	1	(Contact person)
UNS	M	1	
Meter location			
SG 4	R	500	
NAD	M	1	
LOC	R	1	Serial Id. Code list responsible (Company 1) (Area 1) (Company 2) (Area 2)

Product			
SG 8	R	1	
LIN	M	1	Product
MEA	D	1	(Measurement unit)
CUX	D	1	(Currency)
Time/quantity			
SG 12	R	999	
QTY	M	1	Quantity
			Status code
DTM	R	1	Time
UNS	M	1	Section control
CNT	R	1	Total quantity
UNT	M	1	Message trailer

As a minimum the segment groups (with corresponding segments) marked with R or M have to be used in every message.

6.3. Message diagram

The Message diagram below shows the subset of the EDIFACT message that is used in this IG. All segments and segment groups are shown according to the classification in this subset. For a complete overview of the EDIFACT message, please see the next chapter (segment table).

Note: The message type used for the Delivery Schedule message is expanded in comparison to the standard EDIFACT UNSM message DELFOR, with an extra CUX-segment in segment group 8, and segment group 12 is extended from a maximum of 200 occurrences to 999 occurrences.

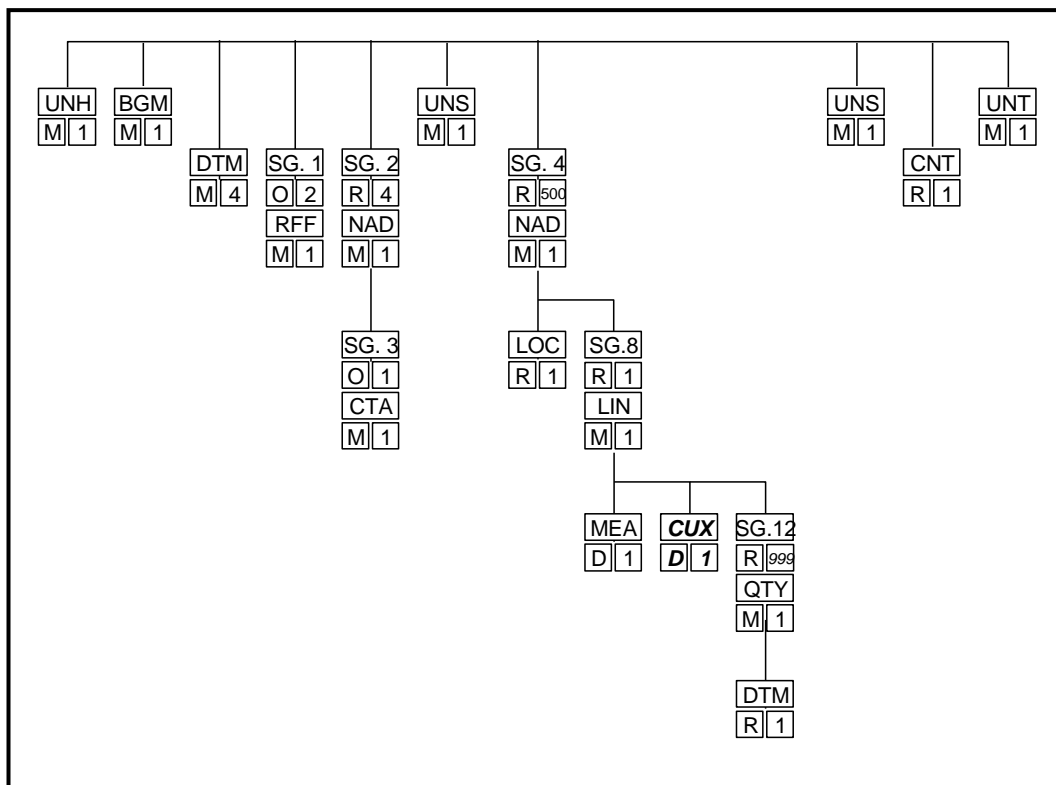


Figure 2 Message diagram for Delivery schedule

6.4. Segment table

In this chapter the segment table for the Delivery schedule messages (DELFOR) is shown by the way it is described in version D, release 96A of the EDIFACT directory, except for the expansion with the CUX segment in segment group 8. The segments and segment groups that are used in this IG are shown in bold type.

HEADER SECTION

UNH Message header	M	1	
BGM Beginning of message	M	1	
DTM Date/time/period	M	10	
----- Segment group 1 -----	C	10	-----+
RFF Reference	M	1	
DTM Date/time/period	C	1	-----+
----- Segment group 2 -----	C	20	-----+
NAD Name and address	M	1	
LOC Place/location identification	C	10	
----- Segment group 3 -----	C	5	-----+
CTA Contact information	M	1	
COM Communication contact	C	5	-----+

DETAIL SECTION

UNS Section control	M	1	
----- Segment group 4 -----	C	500	-----+
NAD Name and address	M	1	
LOC Place/location identification	C	10	
FTX Free text	C	5	
----- Segment group 5 -----	C	10	-----+
DOC Document/message details	M	1	
DTM Date/time/period	C	10	-----+
----- Segment group 6 -----	C	5	-----+
CTA Contact information	M	1	
COM Communication contact	C	5	-----+
----- Segment group 7 -----	C	10	-----+
TDT Details of transport	M	1	
DTM Date/time/period	C	5	-----+
----- Segment group 8 -----	C	9999	-----+
LIN Line item	M	1	
PIA Additional product id	C	10	
IMD Item description	C	10	
MEA Measurements	C	5	
CUX Currencies	C	5	
ALI Additional information	C	5	
GIN Goods identity number	C	100	

GIR	Related identification numbers	C	100		
LOC	Place/location identification	C	100		
DTM	Date/time/period	C	5		
FTX	Free text	C	5		
----- Segment group 9 -----					
CTA	Contact information	M	1	----	+
COM	Communication contact	C	5	----	+
----- Segment group 10 -----					
RFF	Reference	M	1		
DTM	Date/time/period	C	1	----	+
----- Segment group 11 -----					
TDT	Details of transport	M	1		
DTM	Date/time/period	C	5	----	+
----- Segment group 12 -----					
QTY	Quantity	M	1		
SCC	Scheduling conditions	C	1		
DTM	Date/time/period	C	2		
----- Segment group 13 -----					
RFF	Reference	M	1		
DTM	Date/time/period	C	1	----	+
----- Segment group 14 -----					
PAC	Package	M	1		
MEA	Measurements	C	10		
QTY	Quantity	C	5		
DTM	Date/time/period	C	5		
----- Segment group 15 -----					
PCI	Package identification	M	1		
GIN	Goods identity number	C	10	----	+
----- Segment group 16 -----					
QVR	Quantity variances	M	1		
DTM	Date/time/period	C	5		
----- Segment group 17 -----					
RFF	Reference	M	1		
DTM	Date/time/period	C	1	----	+
----- Segment group 18 -----					
LIN	Line item	M	1		
PIA	Additional product id	C	10		
IMD	Item description	C	10		
MEA	Measurements	C	5		
ALI	Additional information	C	5		
GIN	Goods identity number	C	100		
GIR	Related identification numbers	C	100		
DTM	Date/time/period	C	5		
FTX	Free text	C	5		
----- Segment group 19 -----					
RFF	Reference	M	1		

DTM Date/time/period	C	1	-----+
----- Segment group 20 -----	C	50	-----+
QTY Quantity	M	1	
SCC Scheduling conditions	C	1	
DTM Date/time/period	C	2	
----- Segment group 21 -----	C	10	-----+
RFF Reference	M	1	
DTM Date/time/period	C	1	-----+
----- Segment group 22 -----	C	10	-----+
PAC Package	M	1	
MEA Measurements	C	10	
QTY Quantity	C	5	
DTM Date/time/period	C	5	
----- Segment group 23 -----	C	10	-----+
PCI Package identification	M	1	
GIN Goods identity number	C	10	-----+
----- Segment group 24 -----	C	500	-----+
NAD Name and address	M	1	
LOC Place/location identification	C	10	
FTX Free text	C	5	
----- Segment group 25 -----	C	10	-----+
DOC Document/message details	M	1	
DTM Date/time/period	C	1	-----+
----- Segment group 26 -----	C	5	-----+
CTA Contact information	M	1	
COM Communication contact	C	5	-----+
----- Segment group 27 -----	C	50	-----+
QTY Quantity	M	1	
SCC Scheduling conditions	C	1	
DTM Date/time/period	C	2	
----- Segment group 28 -----	C	10	-----+
RFF Reference	M	1	
DTM Date/time/period	C	1	-----+
----- Segment group 29 -----	C	10	-----+
QVR Quantity variances	M	1	
DTM Date/time/period	C	5	
----- Segment group 30 -----	C	10	-----+
RFF Reference	M	1	
DTM Date/time/period	C	1	-----+
----- Segment group 31 -----	C	10	-----+
TDT Details of transport	M	1	
DTM Date/time/period	C	5	-----+

SUMMARY SECTION

UNS Section control	M	1
CNT Control total	C	5
FTX Free text	C	5
UNT Message trailer	M	1

6.5. Description of segments used

The segments and segment groups used in this IG are described below. The description is copied from version D, release 96A of the UN/EDIFACT directory. *The way Ediel uses the segments are described in the next chapter.*

Note: The message type used for the Delivery Schedule message is expanded in comparison to the standard EDIFACT UNSM message DELFOR, with an extra CUX-segment in segment group 8, and segment group 12 is extended from a maximum of 200 occurrences to 999 occurrences.

UNH, Message header

A service segment starting and uniquely identifying a message. The message type code for the UN Delivery Schedule Message is 'DELFOR'.

Note: Delivery Schedule Messages conforming to this document must contain the following data in UNH, composite S009:

Data element 0065 DELFOR
0052 D
0054 96A
0051 ZZ

The code «ZZ» in data element 0051 is used because the message type used for the Delivery Schedule is expanded in comparison to the standard EDIFACT message DELFOR, with an extra CUX-segment.

BGM, Beginning of message

A segment for unique identification of the Delivery Schedule document, by means of its name and its number.

DTM, Date/time/period

A segment specifying the date, and when relevant, the time/period of the beginning and ending of the validity period of the document. The DTM must be specified at least once to identify the Delivery Schedule document date.

The date/time/period segment within other Segment group should be used whenever the date/time/period is logically related to another specified data item.

Segment group 1: RFF

A group of segments giving references relevant to the whole message, e. g. contract number.

RFF, Reference

A segment for referencing documents relating to the whole Delivery Schedule Message, e. g. contract, import/export license.

Segment Group 2: NAD-SG3

A group of segments identifying names, addresses, locations, and contacts relevant to the whole Delivery Schedule.

NAD, Name and address

A segment for identifying names and addresses and their functions relevant for the whole Delivery Schedule. Identification of the seller and buyer parties is recommended for the Delivery Schedule message. Exception: the identification of the recipient of the goods must be given in the NAD segment in the detail section when required.

It is recommended that where possible only the coded form of the party ID should be specified, e. g. the buyer and seller are known to each other, thus only the coded ID is required. The consignee or delivery address may vary and would have to be clearly specified, preferably in structured format.

Segment Group 3: CTA

A group of segments to identify person, function, department and appropriate numbers to whom communication should be directed.

CTA, Contact information

A segment to identify person, function, department to whom communication should be directed.

UNS, Section control

A service segment placed at the start of the detail section to avoid segment collision.

The detail section consists of two main Segment groups, Segment Group 4 and Segment Group 18. The use of one of the Segment groups assumes that the other group will not be used. There are two methods of conveying Product Delivery forecast information. First method is by delivery point (Segment groups 4-17), the second is product driven (Segment Group 18-31).

Segment Group 4: NAD-LOC-FTX-SG8

A group containing delivery names and addresses, related information and details of line items to be consigned to the delivery points.

NAD, Name and address

A segment for identifying names and addresses and their functions relevant to the delivery point.

All other segments in this Segment group 4 following the NAD segment refer to that delivery point.

LOC, Place/location identification

A segment identifying a specific location to which product, as specified in the LIN-Segment groups, should be delivered.

Segment Group 8: LIN-MEA-CUX-SG12

A group of segments providing details of the individual line items for the specified delivery point.

LIN, Line item

A segment identifying the details of the product or service to be delivered, e. g. product identification. All other segments in the detail section following the LIN segment refer to the line item.

MEA, Measurements

A segment specifying physical measurements of the item to be delivered in original or unpacked form.

CUX, Currencies

A segment to indicate currencies.

Segment Group 12: QTY-DTM

A group of segments specifying quantity related information for actual delivery, reporting or cumulative quantities and forecasted quantities as required for the line item.

QTY, Quantity

A segment to specify pertinent quantities which may be relating to schedule(s) and/or pattern established in the SCC/DTM segment, e. g. delivery quantity or a specified date.

DTM, Date/time/period

A segment indicating the date/time/period details relating to the quantity and schedule details in the QTY/SCC segments. This segment may indicate date/time ranges, e. g. start and end dates for a delivery pattern, or delivery window.

UNS, Section control

A service segment placed at the start of the summary section to avoid segment collision.

CNT, Control total

A segment by which control totals may be provided by sender for checking by the receiver.

UNT, Message trailer

A service segment ending a message, giving the total number of segments in the message and the Control reference number of the message.

7. DETAILED DESCRIPTION OF THE MESSAGE

In this chapter all segments and segment groups are specified in detail. In the left column you will find a list of the attributes used.

The EDIFACT segments listed are copies of those defined in the original UN/EDIFACT directory except for data elements defined as conditional (C) which are redefined using the classification described in the Functional Description [3].

Note: The message type used for the Delivery Schedule message is expanded in comparison to the standard EDIFACT UNSM message DELFOR, with an extra CUX-segment in segment group 8, and segment group 12 is extended from a maximum of 200 occurrences to 999 occurrences.



MESSAGE: DELFOR

SG 0

Function: Delivery schedule message is a message sent between parties in the power industry. The message is used for delivery schedule/forecast.

Segments: UNH, BGM, DTM

UNH Message header

Function: A service segment to start and identify a message.

Classification: Mandatory (M1).

Comments:

Example: UNH+1+DELFOR:D:96A:ZZ:EDIEL2'

Message-reference

>

Ref.	Name	Cl.	Form.	Description
0062	MESSAGE REFERENCE NUMBER	M	an..14	The message reference uniquely identifies the message in the interchange. This can for instance be done by using a sequence number that identifies each message in the interchange. The first message will have reference no. 1, the second message will have reference 2, etc. The reference can be set to 1 in the first message of the next interchange.
S009	MESSAGE IDENTIFIER	M		
0065	Message type identifier	M	an..6	Code: DELFOR
0052	Message type version number	M	an..3	Code: D
0054	Message type release number	M	an..3	Code: 96A
0051	Controlling agency	M	an..2	Code: ZZ
0057	Association assigned code	R	an..6	Use the code "EDIEL2" if the Ediel IG is implemented in its full version, or a code of the format "E2yyzz" if a national IG is the basis, where: E2 Indicates Ediel version 2 yy ISO 2 letter country code or an abbreviation for an international organisation zz user guide or national implementation guide version number
0068	COMMON ACCESS REFERENCE	O	an..35	May be used to identify a "business transaction" according to national specifications.
S010	STATUS OF THE TRANSFER	X		
0070	Sequence message transfer number	X	n..2	

Message-type

>

	0073	First/last seq. mess. transfer. indicator.	X	a1	
--	------	---	---	----	--

BGM Beginning of message
Function: A segment for the unique identification of the delivery schedule document, by means of its name and its number.
Classification: Mandatory (M1).
Comments: Data element C002 3055 shall be used if the code not is an official UN/EDIFACT code. I.e. for codes starting with an alphabetic character, such as Z01 or Z02.
Example: BGM+241+AB12345++AB'

Ref.	Name	Cl.	Form.	Description
C002	DOCUMENT/MESSAGE NAME	R		
1001	Document/message name, coded	R	an..3	Code: 241 Delivery schedule
1131	Code list qualifier	X	an..3	
3055	Code list responsible agency, coded	D	an..3	Code: DK Danish Ediel group
1000	Document/message name	X	an..35	
1004	DOCUMENT/MESSAGE NUMBER	R	an..35	Unique Id. of the message. Shall be unique over time for each party.
1225	MESSAGE FUNCTION, CODED	O	an..3	Code: 5 Replace of a previously sent message. 9 Original message
4343	RESPONSE TYPE, CODED	R	an..3	Code: AB Message acknowledgement is required (APERAK). NA No acknowledgement needed

DTM Date/time/period
Function: A segment specifying the date, and the time/period of the document, and the beginning and ending of the processing date/period of the document.
Classification: Mandatory (M4).
Comments: All four repetitions are required. See the Functional description for a description on the use of Time Zone.
Example: DTM+137:199905231205:203'

Message date and Processing date/period >

Ref.	Name	Cl.	Form.	Description
C507	DATE/TIME/PERIOD	M		
2005	Date/time/period qualifier	M	an..3	Code: 137 Message date 163 Processing start date/time 164 Processing end date/time ZZZ Offset to UTC (GMT)
2380	Date/time/period	R	an..35	Date/time/period
2379	Date/time/period format qualifier	R	an..3	Code: 203 CCYYMMDDHHmm, (137, 163, 164) 805 Hour, (ZZZ)



MESSAGE: DELFOR

SG 1

Function: A group of segments giving references relevant to the whole message, e. g. Agreement Id.
Classification: Optional (O2).
Comments: Only to be used if bilaterally agreed.
Segments: RFF

RFF Reference
Function: A segment for referencing documents relating to the whole Delivery Schedule Message. Agreement Id. or reference to an earlier sent message.
Classification: Mandatory (M1).
Comments: When referring to an earlier sent message the message Id. in the BGM segment of the relevant previous message is to be used.
Example: RFF+ACW:AB1996431'

Reference >

Ref.	Name	Cl.	Form.	Description
C506	REFERENCE	M		
1153	Reference qualifier	M	an..3	Code: ACW Ref. no. to previous message CT Contract number (Agreement Id.)
1154	Reference number	R	an..35	Reference no.
1156	Line number	X	an..6	
4000	Reference version number	X	an..35	



MESSAGE: DELFOR

SG 2

Function: A group of segments identifying names, addresses, locations, and contacts relevant to the whole message.
Classification: Required (R4).
Comments: Two repetitions are required.
Segments: NAD, SG 3

NAD Name and address
Function: A segment for identifying names and addresses and their functions relevant for the whole message.
Classification: Mandatory (M1).
Comments:

- See the Functional description for a description of the use of data elements C082 1131 and C082 3055.
- Code «FR» and «DO» in data element 3035 are required

Example: NAD+FR+123456789:NO3:82++++OSLO+++NO'

Party Id.

>

Code list responsible

>

Ref.	Name	Cl.	Form.	Description
3035	PARTY QUALIFIER	M	an..3	Code: FR Message from DO Document recipient C1 In care of party no. 1 C2 In care of party no. 2
C082	PARTY IDENTIFICATION DETAILS	R		
3039	Party id identification	M	an..35	Party identification
1131	Code list qualifier	D	an..3	Code: 100 Enhanced party identification 160 Party identification NO3 Company registration no. from «Foretaksregisteret» in Norway
3055	Code list responsible agency, coded	R	an..3	Code: 9 EAN (International Article Numbering association) 82 «Enhetsregisteret» in Norway 305 ETSO (European Transmission System Operator) EDI Other Id. than power plant SLY Finnish Electricity Association SM Nord Pool ASA SVK Svenska Kraftnät
C058	NAME AND ADDRESS	X		
3124	Name and address line	X	an..35	
3124	Name and address line	X	an..35	
3124	Name and address line	X	an..35	
3124	Name and address line	X	an..35	
3124	Name and address line	X	an..35	

Place		C080	PARTY NAME	X		
		3036	Party name	X	an..35	
		3036	Party name	X	an..35	
		3036	Party name	X	an..35	
		3036	Party name	X	an..35	
		3036	Party name	X	an..35	
		3045	Party name format, coded	X	an..3	
>		C059	STREET	X		
		3042	Street and number/P.O. Box	X	an..35	
		3042	Street and number/P.O. Box	X	an..35	
		3042	Street and number/P.O. Box	X	an..35	
Country	>	3164	CITY NAME	O	an..35	Place (for generation of message)
		3229	COUNTRY SUB-ENTITY IDENTIFICATION	X	an..9	
		3251	POSTCODE IDENTIFICATION	X	an..9	
	>	3207	COUNTRY, CODED	O	an..3	Code: Use ISO 3166-1 two alpha country code, e.g.: DK Denmark FI Finland DE Germany NL Netherlands NO Norway SE Sweden GB United Kingdom



MESSAGE: DELFOR

SG 3

Function: A group of segments to identify people, or departments
Classification: Optional (O1).
Comments: Normally used for sender (code «FR» in NAD, SG. 2)
Segments: CTA

CTA Contact information
Function: A segment to identify the person, or department to whom communication should be directed.
Classification: Mandatory (M1).
Comments: «MR» is used together with «DO» in NAD, SG. 2
 «MS» is used together with «FR» in NAD, SG. 2
 «IC» is used together with «C1» in NAD, SG. 2
Example: CTA+MS+:Ole Olsen'

Ref.	Name	Cl.	Form.	Description
3139	CONTACT FUNCTION, CODED	R	an..3	Code: IC Information contact MR Message recipient contact MS Message sender contact
C056	DEPARTMENT OR EMPLOYEE DETAILS	R		
3413	Department or employee identification	X	an..17	
3412	Department or employee	R	an..35	Contact person or department

Contact >



MESSAGE: DELFOR

SG 0

Function: Start of detail section
Classification: Mandatory (M1).
Comments:
Segments: UNS

UNS Section control
Function: A service segment placed at the start of the detail section to avoid segment collision.
Classification: Mandatory (M1).
Comments:
Example: UNS+D'

Ref.	Name	Cl.	Form.	Description
0081	SECTION IDENTIFICATION	M	a1	Code: D Separates the header and detail section



MESSAGE: DELFOR

SG 4

- Function:** A group containing delivery names and addresses, related information and details of line items to be consigned to the delivery points (Serial Id.).
- Classification:** Required (R500).
- Comments:** At least one repetition is required.
- Segments:** NAD, LOC, SG 8

NAD Name and address
Function: A segment used to identify names and addresses and their functions relevant to the delivery point.
Classification: Mandatory (M1).
Comments: This segment is not used in the Power Industry. To meet the requirements of EDIFACT the code «XX» must be used.
Example: NAD+XX'

Ref.	Name	Cl.	Form.	Description
3035	PARTY QUALIFIER	M	an..3	Code: XX No heading
C082	PARTY IDENTIFICATION DETAILS	X		
3039	Party id identification	X	an..35	
1131	Code list qualifier	X	an..3	
3055	Code list responsible agency, coded	X	an..3	
C058	NAME AND ADDRESS	X		
3124	Name and address line	X	an..35	
3124	Name and address line	X	an..35	
3124	Name and address line	X	an..35	
3124	Name and address line	X	an..35	
3124	Name and address line	X	an..35	
C080	PARTY NAME	X		
3036	Party name	X	an..35	
3036	Party name	X	an..35	
3036	Party name	X	an..35	
3036	Party name	X	an..35	
3036	Party name	X	an..35	
3045	Party name format, coded	X	an..3	
C059	STREET	X		
3042	Street and number/P.O. Box	X	an..35	
3042	Street and number/P.O. Box	X	an..35	
3042	Street and number/P.O. Box	X	an..35	
3164	CITY NAME	X	an..35	
3229	COUNTRY SUB-ENTITY IDENTIFICATION	X	an..9	
3251	POSTCODE IDENTIFICATION	X	an..9	
3207	COUNTRY, CODED	X	an..3	

LOC	Place/location identification
Function:	A segment identifying Serial Id. (a meter location, an area or a contract) with connected information.
Classification:	Required (R1).
Comments:	
Example:	LOC+90+S-12345::SM'

		Ref.	Name	Cl.	Form.	Description
		3227	PLACE/LOCATION QUALIFIER	M	an..3	Code: 90 Place/location (Serial Id.)
Serial Id.	>	C517	LOCATION IDENTIFICATION	R		
		3225	Place/location identification	R	an..25	Serial Id.
		1131	Code list qualifier	X	an..3	
Code list responsible	>	3055	Code list responsible agency, coded	R	an..3	Code: 9 EAN (International Article Numbering association) 91 Assigned by seller 92 Assigned by buyer 305 ETSO (European Transmission System Operator) DK Danish Ediel group ELT Eltra EKS Elkraft SM Nord Pool ASA SLY Finnish Electricity Association SVK Svenska Kraftnät
		3224	Place/location	X	an..70	
Company 1	>	C519	RELATED LOCATION ONE IDENTIFICATION	O		
		3223	Related place/location one identification	D	an..25	Company 1
		1131	Code list qualifier	X	an..3	
Code list responsible	>	3055	Code list responsible agency, coded	R	an..3	Code: 9 EAN (International Article Numbering association) 305 ETSO (European Transmission System Operator) DK Danish Ediel group ELT Eltra EKS Elkraft SLY Finnish Electricity Association SM Nord Pool ASA SVK Svenska Kraftnät
Area 1	>	3222	Related place/location one	D	an..70	Area 1
Company 2	>	C553	RELATED LOCATION TWO IDENTIFICATION	O		
		3233	Related place/location two identification	D	an..25	Company 2
		1131	Code list qualifier	X	an..3	
Code list responsible	>	3055	Code list responsible agency, coded	R	an..3	Code: 9 EAN (International Article Numbering association) 305 ETSO (European Transmission System Operator) DK Danish Ediel group ELT Eltra EKS Elkraft SLY Finnish Electricity Association SM Nord Pool ASA SVK Svenska Kraftnät
Area 2	>	3232	Related place/location two	D	an..70	Area 2

	5479	RELATION, CODED	X	an..3	
--	------	-----------------	---	-------	--



MESSAGE: DELFOR

SG 8

Function: A group of segments providing details of the individual line items for the specified Serial Id.
Classification: Required (R1).
Comments:
Segments: LIN, MEA, CUX, SG 12

LIN Line item
Function: A segment identifying the details of the product or service to be delivered, e. g. product identification. All other segments in the detail section following the LIN segment refer to the line item.
Classification: Mandatory (M1).
Comments: A list over generic product codes can be found in the Functional description.
Example: LIN+++8716867000016:::9'

Product

>

Ref.	Name	Cl.	Form.	Description
1082	LINE ITEM NUMBER	X	n..6	
1229	ACTION REQUEST/ NOTIFICATION, CODED	X	an..3	
C212	ITEM NUMBER IDENTIFICATION	R		
7140	Item number	R	an..35	Code: (See separate code lists)
7143	Item number type, coded	X	an..3	
1131	Code list qualifier	X	an..3	
3055	Code list responsible agency, coded	R	an..3	Code: 9 EAN (International Article Numbering association) 305 ETSO (European Transmission System Operator) DK Danish Ediel group ELT Eltra EKS Elkraft SLY Finnish Electricity Association SM Nord Pool ASA SVK Svenska Kraftnät
C829	SUB-LINE INFORMATION	X		
5495	Sub-line indicator, coded	X	an..3	
1082	Line item number	X	n..6	
1222	CONFIGURATION LEVEL	X	n..2	
7083	CONFIGURATION, CODED	X	an..3	

MEA Measurements

Function: A segment specifying physical measurements of the item to be delivered.

Classification: Dependent (D1).

Comments:

- The measure unit qualifiers MWh/h, kWh/h, MVARh/h and kVARh/h are advised not be used in new applications. Please see the functional description for information about the use of measurement unit qualifiers for power and energy.
- This segment shall be used if anything other than «MWh/h» is used as measurement unit.
- See chapter 5 for a description of the use of this segment.

Example: MEA+AAZ++MWH'

Measure unit >

Ref.	Name	Cl.	Form.	Description
6311	MEASUREMENT APPLICATION QUALIFIER	M	an..3	Code: AAZ Handling unit measurement
C502	MEASUREMENT DETAILS	X		
6313	Measurement dimension, coded	X	an..3	
6321	Measurement significance, coded	X	an..3	
6155	Measurement attribute, coded	X	an..3	
6154	Measurement attribute	X	an..70	
C174	VALUE/RANGE	R		
6411	Measure unit qualifier	M	an..3	Code: <i>Power</i> KVR kvar (Kilovar) KWT kW (Kilowatt) MAW MW (Megawatt) MVA MVA (Megavolt-ampere) Z03 MVAR (MegaVolt-Ampere reactive power)

					<p>Code cont.:</p> <p><i>Energy</i></p> <p>3B MJ (Megajoule)</p> <p>GV GJ (Gigajoule)</p> <p>GWH GWh (Gigawatt-hour)</p> <p>KWH kWh (Kilowatt-hour)</p> <p>K3 kVArh (KiloVolt-Ampere reactive hour) - (also to be used for kVArh/h)</p> <p>MWH MWh (Megawatt-hour)</p> <p>Z01 MWh/h (Megawatt-hour per hour)</p> <p>Z02 kWh/h (Kilowatt-hour per hour)</p> <p>Z04 MVARh/h (MegaVolt-Ampere reactive hour per hour) – (also to be used for MVARh)</p> <p>Z05 MW/Hz (Frequency adjustment)</p> <p>Z09 MJ/s (Megajoule/second)</p> <p><i>Miscellaneous</i></p> <p>A97 hPa (Hectopascal), i.e. atmospheric pressure</p> <p>CEL Degrees Celsius</p> <p>D54 Global solar radiation</p> <p>HTZ Hertz</p> <p>LTR Litre</p> <p>MMT Millimetre (i. e. precipitation)</p> <p>MQH m3/h (Cubic metre per hour), flow rate, e.g. used for hot water)</p> <p>MQS Cubic metre/second, water</p> <p>MTQ Cubic metre</p> <p>MTR Metre</p> <p>MTS Metre per second (i. e. Wind force)</p> <p>P1 Percent</p> <p>SEC Seconds</p> <p>Z07 8-parts (i. e. Cloud cover)</p> <p>Z08 Wind direction (0-360)</p> <p>Z10 Only price (see CUX)</p> <p>Z14 Danish Tariff code</p> <p>Z15 kWh/m3</p>
	6314	Measurement value	X	n..18	
	6162	Range minimum	X	n..18	
	6152	Range maximum	X	n..18	
	6432	Significant digits	X	n..2	
	7383	SURFACE/LAYER INDICATOR, CODED	X	an..3	

- CUX** Currencies
- Function:** To specify currencies used in the time series.
- Classification:** Depending (D1).
- Comments:**
- Only to be used if the time series describes monetary amounts.
 - The currency, if used, is always used together with a measure unit in the MEA segment (or MWh/h as default).
 - See chapter 5 for a description on the use of this segment.
 - This segment is an addition to the standard UN/EDIFACT message.
- Example:** CUX+2:SEK'

Currency

>

Ref.	Name	Cl.	Form.	Description
C504	CURRENCY DETAILS	R		
6347	Currency details qualifier	M	an..3	Currency details qualifier Code: 2 Reference currency (The currency applicable to amounts stated. It may have to be converted).
6345	Currency, coded	R	an..3	ISO currency code Code: DKK Denmark - Krone NOK Norwegian - Krone RUR Russia - Ruble SEK Sweden – Krona EUR Euro
6343	Currency qualifier	X	an..3	
6348	Currency rate base	X	n..4	
C504	CURRENCY DETAILS	X		
6347	Currency details qualifier	X	an..3	
6345	Currency, coded	X	an..3	
6343	Currency qualifier	X	an..3	
6348	Currency rate base	X	n..4	
5402	RATE OF EXCHANGE	X	n..12	
6341	CURRENCY MARKET EXCHANGE, CODED	X	an..3	



MESSAGE: DELFOR

SG 12

Function: A group of segments specifying quantity related information for actual delivery, reporting or cumulative quantities and forecast quantities as required for line item.

Classification: Required (R999).

Comments:

- This segment group is extended from a maximum of 200 occurrences to 999 occurrences in comparison to the standard DELFOR UNSM D.96A.
- At least one repetition is required.

Segments: QTY, DTM

QTY Quantity

Function: A segment to specify pertinent quantities, which may be relating to schedule(s) and/or pattern established in the DTM segment, e. g. delivery quantity or a specified date.

Classification: Mandatory (M1).

Comments:

- Measurements are defined in MEA in SG 8.
- If the code in C186 6063 is «Z03, No value» - the value in C186 6060 should be 0 (zero).
- The codes «99» and «Z03» in data element C186 6063 is only used for reached quantities for meteorological data.
- The code “346, number of units” is used for the number of metering points related to the other values currently reported.

Example: QTY+135:90'

Ref.	Name	Cl.	Form.	Description
C186 6063	QUANTITY DETAILS	M		Code: 99 Estimated quantity 135 Period quantity, planned 136 Period quantity, reached 346 Number of units Z03 No value
	Quantity qualifier	M	an..3	
6060 6411	Quantity	M	n..15	Quantity
	Measure unit qualifier	X	an..3	

Status code >

Quantity >

Time >

DTM Date/time/period
Function: A segment indicating the date/time/period details relating to the quantity and schedule details in the QTY segment. This segment may indicate date/time ranges, e. g. start and end dates for a delivery pattern, or delivery window.
Classification: Required (R1).
Comments:

- Time zone is defined in DTM in SG 0. See the Functional description for a description on the use of the format qualifier.
- Code «203» in data element C507 2379 is used for reporting instant values.

Example: DTM+324:199905080100199905090000:Z13'

Ref.	Name	Cl.	Form.	Description
C507	DATE/TIME/PERIOD	M		
2005	Date/time/period qualifier	M	an..3	Code: 324 Processing date/period
2380	Date/time/period	R	an..35	Date/time/period
2379	Date/time/period format qualifier	R	an..3	Code: 203 CCYYMMDDHHmm Z13 CCYYMMDDHHmm- CCYYMMDDHHmm (Without hyphen)



MESSAGE: DELFOR

SG 0

Function: Summary section
Classification: Mandatory (M1).
Comments:
Segments: UNS, CNT, UNT

UNS Section control
Function: A service segment placed at the start of the summary section to avoid segment collision.
Classification: Mandatory (M1).
Comments:
Example: UNS+S'

Ref.	Name	Cl.	Form.	Description
0081	SECTION IDENTIFICATION	M	a1	Code: S Separates the detail and summary sections

CNT Control total
Function: A segment by which control totals may be provided by the sender, for checking by the receiver.
Classification: Required (R1).
Comments: A net sum for the quantity in the QTY segment in SG 12 shall be sent. Positive quantities are added while negative quantities are subtracted.
Example: CNT+1:224'

Ref.	Name	Cl.	Form.	Description
C270	CONTROL	M		
6069	Control qualifier	M	an..3	Code: 1 Algebraic total of the quantity values
6066	Control value	M	n..18	Net sum for the quantity
6411	Measure unit qualifier	X	an..3	

Total quantity >

UNT Message trailer
Function: A service segment ending a message, giving the total number of segments in the message and the control reference number of the message.
Classification: Mandatory (M1).
Comments:
Example: UNT+34+1'

Ref.	Name	Cl.	Form.	Description
0074	NUMBER OF SEGMENTS IN THE MESSAGE	M	n..6	Number of segments in the message, including UNH and UNT.
0062	MESSAGE REFERENCE NUMBER	M	an..14	Control reference number. Equal to 0062 in UNH

Appendix A EXAMPLES OF EDIFACT MESSAGES

A.1 Danish example, plan

UNA:+.? '
UNB+UNOC:3+5791111333334:14+5790000832057:14+031105:1042+DEW6538++++1'
UNH+1+DELFOR:D:96A:ZZ:EDIEL2'
BGM+241+DEW6538+9+NA'
DTM+137:200311051042:203'
DTM+163:200311060000:203'
DTM+164:200311070000:203'
DTM+ZZZ:1:805'
NAD+FR+5791111333334::9'
NAD+DO+5790000832057::9'
UNS+D'
NAD+XX'
LOC+90+AAA_HPL_TTT::ELT+5791111333334::9+5790000667789::9'
LIN+++7054:::ELT'
MEA+AAZ++MWH'
QTY+135:-20.8'
DTM+324:200311060000200311060100:Z13'
QTY+135:-20.0'
DTM+324:200311060100200311060200:Z13'
QTY+135:20.4'
DTM+324:200311060200200311060300:Z13'
....

QTY+135:-10.9'
DTM+324:200311062200200311062300:Z13'
QTY+135:-10.1'
DTM+324:200311062300200311070000:Z13'
NAD+XX'
LOC+90+AAA_HPL_NP::ELT+5791111333334::9+7080000739189::9'
LIN+++1027:::ELT'
MEA+AAZ++MWH'
QTY+135:20.8'
DTM+324:200311060000200311060100:Z13'
QTY+135:20.0'
DTM+324:200311060100200311060200:Z13'
QTY+135:-20.4'
DTM+324:200311060200200311060300:Z13'
....

QTY+135:10.9'
DTM+324:200311062200200311062300:Z13'
QTY+135:10.1'
DTM+324:200311062300200311070000:Z13'
UNS+S'
CNT+1:0.0'
UNT+116+1'
UNZ+1+DEW6538'

A.2 Norwegian/Swedish example

UNA:+.? '
UNB+UNOB:2+82800:ZZ+102965662952:82+990413:1049+22+++++1'
UNH+1+DELFOR:D:96A:ZZ:EDIEL2'
BGM+241+828000842601112+9+AB'
DTM+137:199905131048:203'
DTM+163:199905132100:203'
DTM+164:199905132300:203'
DTM+ZZZ:1:805'
NAD+DO+965662952:NO3:82++++OSLO+++NO'
NAD+FR+82800:160:SVK++++HARJAVALTA+++FI'
CTA+MS+:MR. POWER'
UNS+D'
NAD+XX'
LOC+90+FIPVO-TVS000ISH::SLY+:::TVS000ISH'
LIN+++1027:::SVK'
MEA+AAZ++Z01'
QTY+136:-33.020'
DTM+324:199905132100199905132200:Z13'
QTY+136:-38.090'
DTM+324:199905132200199905132300:Z13'
NAD+XX'
LOC+90+FIPVO-IVS000MP::SLY+:::IVS000MP'
LIN+++1027:::SVK'
MEA+AAZ++Z01'
QTY+136:-505.000'
DTM+324:199905132100199905132200:Z13'
QTY+136:-454.900'
DTM+324:199905132200199905132300:Z13'
UNS+S'
CNT+1:-13725.071'
UNT+29+1'
UNZ+1+22'