TEXAS INSTRUMENTS

IMPLEMENTATION GUIDELINE

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TRADITIONAL PURCHASE ORDER

ooOoo

VERSION 3

ooOoo

BASED ON

EDIFICE D.97A ORDERS MESSAGE, ISSUE EDPO04

This document can be found on the World Wide Web from:
http://www.ti.com/sc/docs/scedi/sctecpak.htm

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INTRODUCTION

This guide was developed by members of the Texas Instruments EDI message development Group. It is based on the guide developed by members of the Electronics Industry through the associations representing Europe (EDIFICE), Japan (EIAJ) and the USA (EIDX). It represents and is specific to the usage as specified by Texas Instruments.

COMPARISON TO PREVIOUS ISSUE

This release includes the changes that have been made to the version 1 of the Purchase Order document created by Texas Instruments Incorporated in January 1997. The changes are as follows:

- Recast from the 92.1 version of the UN/EDIFACT directory to the D.97A version,

- Removal of the following segments:
        SG6, TAX segment
        SG32, PAC segment

- Removal of the following code values:
        DTM segment, DE 2379, code '101' YYMMDD
        SG2, NAD segment, DE 3035, code 'SE' Seller
        SG28, QTY segment, DE 6411, code 'CLT' centilitre, 'CMT' centimetre, 'GRM' gram,
        'KGM' kilogram, 'LTR' litre, 'MGM' milligram, 'MMT' millimetre, 'MTK' square metre
        'MTQ' cubic metre
        SG54, DTM segment, DE 2379, code '101' YYMMDD

- Addition of the following segments:
        SG28, IMD segment
        SG28, ALI segment

- Addition of the following code values:
        SG6, TAX segment, CO C241, DE 5153, code 'VAT' Value added tax
        SG34, PAC segment, CO C202, DE 3055, code '116' US, ANSI ASC X12,

- Usage changed for the following segment groups/segments/data elements:
        none

- Where UN/ECE Recommendations are referenced the most commonly used codes have been
  identified,

- Update of the REFERENCES and EXPLANATORY NOTES section to comply with the
  Documentation Rules for EDIFICE Implementation Guidelines issue 3,

- Update of examples,

- Documentation adjustments resulting from the use of GEFEG's EdiFix Message
  Implementation Guidelines documentation tool,

- Correction of typographical errors.

FUNCTIONAL DEFINITION

Introduction

It is advised to read the functional definition and study the message guideline examples thoroughly before implementing any of the three messages.

EDIFICE provides three interrelated messages for the purchase ordering process: The Purchase Order (ORDERS), the Purchase Order Change Request (ORDCHG) and the Purchase Order Response (ORDRSP). Together they are used to form a purchase order cycle.

This usage has been created with the intention of satisfying about eighty percent of the electronics industry EDI ordering requirements. It is a 'core' set of segments for the order transaction. During the development of this document it has been recognised that there are further requirements that are special to certain areas of the electronics industry. These requirements will need to be considered under a separate document.

EDI Business Architecture for the Order cycle

The traditional order cycle caters for the ordering of materials under a business or commercial agreement. It is assumed that this agreement defines all standard, basic trading terms and conditions as agreed between the two parties. As such, all three messages used in the traditional order cycle always constitute a business transaction under this agreement, to which they will refer for basic terms and conditions.

Buyer calculates requirements and places purchase orders, based upon agreed standard product and pricing info, or upon Request for Quote/Quotes.

```
                                           Notes

      Buyer        Purchase Order               1       Seller
  +------------+   ------------------------->           +------------+
  | Purchasing |   Purchase Order Ack         2       | Sales/Order|
  |            |   <------------------------           |   Admin    |
  |            |   Seller Initiated Change    -+ 3     |            |
  +------------+   <------------------------    |       +------------+
                   Change Order               -+ |  4
                   ------------------------->    | |
                   Change Order Ack             | |  5
                   <------------------------   -+ -+
```
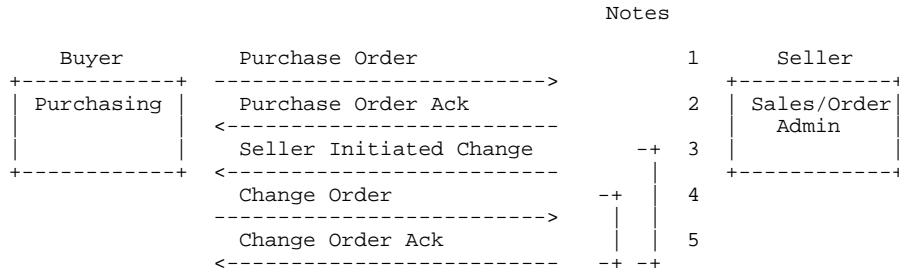
1 Buyer generates (stand-alone)   4C Change Orders issued from
   Purchase Order using ORDERS.   buyer to notify seller of
                                          acceptance of seller-initiated
2 Seller responds with Order   changes using ORDCHG (option)
   Response using ORDRSP.

3 Seller-initiated changes done via 5A Seller acknowledges Buyer-
   Order Response using ORDRSP.   Initiated Change Orders via
                                          Order Response using ORDRSP.
4A Change Orders issued from   This ends the loop.
   buyer to convey buyer-initiated
   changes using ORDCHG.   5B Seller acknowledges Change
                                          Orders issued by Buyer, as a
4B Change Orders issued from buyer   result of Seller-initiated
   to notify seller of non-acceptance   changes using ORDRSP. This
   of seller-initiated changes using   ends the loop.
   ORDCHG (exception process).

Order Cycle Principles

- The original Purchase Order should refer to a business or commercial agreement. Any subsequent message to the original Purchase Order should refer to the original Purchase Order. In doing so, reference to the business or commercial agreement for the business transaction is given indirectly. Therefore, no reference to the contract or quote agreement needs to be specified in Purchase Order Change Requests or Purchase Order Responses following the Purchase Order unless a Purchase Order Change Request is issued to add line items to the Purchase Order.

- If references to more than one contract/quote exist in the same order cycle, an overall agreement applicable to all contracts/quotes involved regarding payment terms, terms of delivery (i.e. data at header level) is needed between the business partners, as this information cannot be conveyed per contract/quote in the EDI message.

- It is recommended to exclude all information that could be previously agreed in a business or commercial agreement from the EDI messages.

- One item number (Product Number) agreed to be the primary reference number between the buyer and the seller should be used to identify the item being ordered.

- To identify the individual items being ordered (SG28), the combination of the Buyer's original Document Number (BGM DE 1004) and the Buyer's original line number (RFF in SG33 DE 1156) will normally be used. Any other means of identification must be agreed upon by the trading partners in the Trading Partner Agreement.

- All information related to purchased goods must be specified at the line item level, to avoid any ambiguity. Thus each line item can be treated as an order.

- It is strongly advised not to take minor corrective actions or changes via EDI. One of the objectives of EDI is to provide good data. Should bad data be transmitted or should a change request occur for administrative data in the Header section, then corrective action would normally take place via other means than EDI.

- The use of free text in the messages is highly discouraged.

- Business partners must agree either to send contract/quote information at header level or at line level, all through the order cycle. It is recommended to have these references at the header level for simplicity of processing.

In order to keep the interrelation between the three messages unambiguous, a couple of key definitions and basic assumptions in the information flow need to be clarified.

- If a Purchase Order has more than one line item, it has to be considered as a collection of one line item Purchase Orders being identified by the Purchase Order number and the line item number. Each line item therefore has its own life cycle.

- Each transmitted message in the order cycle must have a unique document number in BGM DE 1004.

EDIFICE recommends to keep all references to preceding messages (except for the reference to the original Purchase Order) at detail level in the RFF segment in SG33. Only if mutually agreed between trading partners and if these references are the same for all line items they may be given at header level in the RFF segment in SG1 and not at the detail level.

Purchase Order Change Request

The Purchase Order Change Request is issued to:

- Request a modification of a previously sent Purchase Order,
- Request a modification of previously sent Purchase Order Change Request/Requests,
- Respond to amendments as proposed in one or many previously sent Purchase Order Response/Responses by the seller,
- State acceptance to amendments as proposed in one or many previously sent Purchase Order Response/Responses by the seller.

A change may NOT be requested on:

- Following information in the Header section: Original Purchase Order number, Currency and the identification of buyer and seller. These changes may only be requested by deleting the line items of the referenced message and placing a new order. Deletion of one, many or all line items involved in a transaction is indicated in LIN, DE 1229, for each separate line item using the value '2' (deleted).
- Those data elements which identify the individual items being ordered (RFF in SG33). These changes may only be requested by deleting the referenced line item and adding a new one.
- The information which identifies the item ordered (LIN DE 7140).

A Purchase Order Change Request must always refer to the original Purchase Order at Header level. Furthermore, the last received Purchase Order Response proposing a change to a line item by the seller or the last transmitted Purchase Order Change Request requesting amendments to a line item by the buyer should be referenced at Detail level for the line item concerned (if any). Only if mutually agreed between trading partners and if these references are the same for all line items they may be given at header level in the RFF segment in SG1 and not at the detail level.

The following data must be transmitted:

- Those required to identify the individual items being ordered (RFF in SG33).
- All segments below the LIN segment, when there is a proposed change in one of them.

It is up to the trading partners to decide whether to transmit the entire detail section (including those line items which have not been changed) or only those line items which have changed.

Trading partners may by mutual agreement decide to make the sending of "scheduling conditions (SCC/QTY/DTM) as it was BEFORE the now transmitted message" optional if the information is not needed in their business relationship.

A single segment group SCC must always precede a single SG52, except when there is a request to split the previous schedule. It is recommended to send the previous schedules before the current schedules, either on a one to one basis or grouped together. This must be previously agreed by the trading partners.

It is also up to the trading partners to agree whether quantities previously ordered and received are included in the QTY segments of SG52.

Any change request on information open for change in the header section will automatically apply to the whole original purchase order.

When a line item in the Purchase Order Change Request is sent as "deleted", "not found" or "not amended" by means of the appropriate code for DE 1229 of the LIN segment, no underlying segments of the LIN need to be transmitted except for the RFF segments specifying the original Purchase Order line number and the preceding message document number (if any). If information in the underlying segment is transmitted, all relevant underlying segments must be transmitted.

Purchase Order Response

A Purchase Order Response is issued to:

- State acceptance to the conditions set out in the Purchase Order or Purchase Order Change Request/Requests as requested by the buyer.
- Propose a modification of the previously received Purchase Order
- Propose a modification of previously received Purchase Order Change Request/Requests

Any change request conveyed in an ORDRSP by the seller is to be considered as a proposal.

In case of non-acceptance by the seller, the Purchase Order Response may not propose changes to:

- The Header section except for SG19 (Allowance or charge) of the referenced message. These may only be proposed by not accepting the line items of the referenced message. Non-acceptance of one, many or all line items involved in the transaction is indicated in LIN, DE 1229 for each separate line item using the value '7' (Not accepted).
- Those data elements which identify the individual items being ordered (RFF in SG33).
- The information which identifies the item ordered (LIN DE 7140).

A Purchase Order Response must always refer to the original Purchase Order at Header level. Furthermore, the last received Purchase Order Change Request requesting amendments to a line item by the buyer should be referenced at Detail level for the line item concerned (if any). Only if mutually agreed between trading partners and if these references are the same for all line items they may be given at header level in the RFF segment in SG1 and not at the detail level.

Note that a Purchase Order Response never references the last transmitted Purchase Order Response for the line item in question. The Purchase Order Response is always sent in response to the last received message from the buyer.

The following data must be transmitted:

- That required to identify the individual items being ordered (RFF in SG33).
- All segments below the LIN segment, when there is a proposed change in one of them.

Acknowledgement, confirmation and proposed amendments may be mixed within the message using the appropriate code in LIN.

It is up to the trading partners to decide whether to transmit the entire detail section (including those line items which have not been acted upon) or only those line items which have been acted upon.

Trading partners may by mutual agreement decide to make the sending of "scheduling conditions (SCC/QTY/DTM) as it was BEFORE the now transmitted message" optional if the information is not needed in their business relationship.

A single segment group SCC must always precede a single SG52, except when there is a proposal to split the previous schedule. It is recommended to send the requested schedules before the proposed schedules, either on a one to one basis or grouped together. This must be previously agreed by the trading partners.

It is also up to the trading partners to agree whether quantities previously ordered and received are included in the QTY segments of SG52.

A proposed change to SG19 (Allowance or charge) will automatically apply to the whole purchase order.

When a line item in the Purchase Order Response is acknowledged as "no action", "accepted without amendment", "not accepted", "deleted" or "not found", by means of the appropriate code for DE 1229 of the LIN segment, no underlying segments of the referenced LIN need to be transmitted except for the RFF segments specifying the original Purchase Order line number and the preceding message from the buyer, i.e. preceding Purchase Order Change Request document number (if any). If information in the underlying segments is transmitted, all relevant underlying segments must be transmitted.

Structure of references and scheduling conditions

(for further clarification, see Example 4)

The three messages involved in the purchase order cycle interact at line item level. For example, an original Purchase Order or a Purchase Order Change Request with multiple line items may be responded to with several different Purchase Order Responses. Each one of the Responses may contain responses to one or many of the requested line items of the original Purchase Order or Purchase Order Change Request. Accordingly, a Purchase Order Change Request may contain amendments to one or many line items of a previously transmitted Purchase Order, Purchase Order Change Request or received Purchase Order Response.

Also, the line items that are being responded to in a Purchase Order Response may originate from a Purchase Order or from several Purchase Order Change Requests or from both the original Purchase Order and one or many previous Purchase Order Change Requests. The line items that are being amended in a Purchase Order Change Request may, according to the same principle, originate from several different preceding messages.

Basically, there is an interrelated mechanism in the messages which enable the interaction at line item level: the reference to the previously sent message at line item level, which automatically gives the reference to the previously communicated scheduling conditions for the line item in question.

- ORDERS
  ```
  BGM           :    purchase order number
  RFF (SG1)     :    contract/quote information
  RFF (SG33)    :    line number
  QTY (SG54)    :    ordered quantity
  DTM (SG54)    :    requested delivery/shipment date
  ```

- ORDRSP
  ```
       BGM           :    purchase order response number
       RFF (SG1)     :    purchase order number
       RFF (SG31)    :    line number
       RFF (SG31)    :    preceding Purchase Order Change document number for this line item
  a)   QTY (SG52)    :    ordered quantity
       DTM (SG52)    :    requested delivery/shipment date
  b)   QTY (SG52)    :    quantity to be delivered
       DTM (SG52)    :    schedule delivery/shipment date
  ```

- ORDCHG
  ```
       BGM           :    purchase order change request number
       RFF (SG1)     :    purchase order number
       RFF (SG31)    :    line number
       RFF (SG31)    :    preceding message document number for this line item (Purchase Order
                          Change or Purchase Order Response)
  a)   QTY (SG52)    :    previous order quantity
       DTM (SG52)    :    superseded date
  b)   QTY (SG52)    :    proposed new order quantity
       DTM (SG52)    :    schedule delivery/shipment date
  ```

Any subsequent Purchase Order Change or Purchase Order Response to the original order should include
a)   the scheduling conditions (QTY/DTM) as they were BEFORE the now transmitted message, if agreed by the trading partners,
     and
b)   the new proposed/requested scheduling conditions except where SG52 is used for positioning or where a line item is being added (see message details for further explanation).

The situation a) is always retrieved from the preceding message for the line item in question.

The preceding message for the line item is always referenced in the RFF segment in SG31.

The original Purchase Order for the line item (and for all line items in the same subsequent message) is always referenced in the RFF segment in SG1.

If no preceding message exists other than the original Purchase Order, there will be no reference in SG31 except for the line number reference. If this is the case, situation a) should be retrieved from the original Purchase Order.

For each line item, there can only be one reference to the preceding message at line item level as there can only ever be one preceding message for that line item.

Identified timing problem:

A mismatch in the referencing mechanism might appear if the buyer and the seller transmit messages involving the same line item/items at the same time. It is up to the business partners to agree on how to handle the situation if it should occur.

REFERENCES

UN/EDIFACT DIRECTORY D.97A 1996-12-10
```
    - DRAFT RECOMMENDATION PURCHASE ORDER MESSAGE
        Message Type        : ORDERS
        Version             : D
        Release             : 97A
        Controlling Agency  : UN
        Revision            : 7
        Date                : 96-12-13
    - DATA SEGMENTS DIRECTORY
    - COMPOSITE DATA ELEMENTS DIRECTORY
    - DATA ELEMENTS DIRECTORY
    - CODE LISTS
```

ISO Standards
```
    - ISO 9735 UN/EDIFACT - Applications level syntax rules
        First edition 1988-07-15
        Amended and Reprinted 1990-11-15
    - ISO 3166 Code for the Representation of Names of Countries
        Date    : 1993
    - ISO 4217 Code for the Representation of Currencies and Funds
        Date    : 1995
    See also web-site : http://www.iso.ch
```

UN/ECE Recommendations
```
    - No 20 Codes for Units of Measure used in International Trade
        Date    : August 1995
    - No 21 Codes for Types of Cargo, Packages and Packaging Material
        Date    : March 1986
    See also web-site: http://www.unece.org/trade/facil/tf_rec_h.htm
```

Core European Implementation Guidelines
```
    - Introduction
        Date    : 1996-01-22
    - Purchase Order
        UN/EDIFACT Directory    : 92.1/D.93A
        Date    : 1996-01-22
```

EDIFICE
```
    - Documentation Rules for EDIFICE Implementation Guidelines
        Issue   : 3
        Date    : 1998-09-24
    - EDIFICE Utilisation of the UN/EDIFACT Service Segments
        Issue   : 3
        Date    : 1998-09-24
```

EXPLANATORY NOTES

General

The following abbreviations are used within this document:

DE = Data Element
CO = Composite Data Element
SG = Segment Group

The following codes are used to indicate, in a more detailed and precise way than UN/EDIFACT, the usage of the data concerned in the EDIFICE Message Implementation Guidelines:

UN/EDIFACT	EDIFICE
M (Mandatory)	M (Mandatory)
C (Conditional)	R (Required)
C (Conditional)	D (Depending)
C (Conditional)	A (Advised)
C (Conditional)	O (Optional)
C (Conditional)	N (Not Used)

Mandatory = UN/EDIFACT dictates that the Data Element, Composite Data Element, Segment or Segment Group must be present.

Required   = Indicates that the entity is required and must be sent.

Depending = Indicates that the entity must be sent if a particular defined condition or set of conditions exists. The associated conditions must be explained at the appropriate level of detail.

Advised   = Indicates that the entity is advised or recommended and should be sent if previously agreed between the trading partners.

Optional   = Indicates that the entity is optional and may be sent if previously agreed between the trading partners.

Not Used   = Indicates that the entity is not used and should be omitted.

Where a Composite Data Element is indicated as 'Not Used', the column 'usage status' for the Data Elements will remain blank.

The number of occurrences shown in the EDIFICE Message Diagrams indicates the required or maximum number of occurrences for the entity utilisation.

The EDIFICE usage status and number of occurrences for segments or segment groups will be
represented analogue to the representation of data elements e.g.:

    R3   The segment or group is required 3 times (fixed number)
    R..3 The segment or group is required up to 3 times (maximum number)

The following table indicates the number of integer and decimal digits to be used for numeric data
elements when needed:

Numeric Class	Representation Digits	Integer Digits	Decimals
Dimensions	n..18	15	3
Quantities	n..15	12	3
Volumes	n..18	15	3
Weights	n..18	15	3
Unit Prices	n..15	11	4
Amounts	n..18	15	3
Currency Rates	n..12	6	6
Percentages	n..8	3	5

EDIFICE recommends that where there are significant decimals, these are explicitly stated using a
decimal mark in a character position. Similarly the minus sign should be used to explicitly state a
negative value.

MESSAGE STRUCTURE CHART

```
     UNH     MESSAGE HEADER                           M1
     BGM     BEGINNING OF MESSAGE                     M1
     DTM     DATE/TIME/PERIOD                         M1
 ┌── SG1                                              A..3
 └── RFF     REFERENCE                                M1
 ┌── SG2                                              R..2
 │   NAD     NAME AND ADDRESS                         M1
 │┌─ SG5                                              O1
 └┴─ CTA     CONTACT INFORMATION                      M1
 ┌── SG7                                              D1
 └── CUX     CURRENCIES                               M1
 ┌── SG28                                             R..9999
 │   LIN     LINE ITEM                                M1
 │   PIA     ADDITIONAL PRODUCT ID                    D..3
 │   IMD     ITEM DESCRIPTION                         D1
 │   QTY     QUANTITY                                 R1
 │   ALI     ADDITIONAL INFORMATION                   O1
 │┌─ SG32                                             A1
 │└─ PRI     PRICE DETAILS                            M1
 │┌─ SG33                                             R..3
 │└─ RFF     REFERENCE                                M1
 │┌─ SG39                                             O1
 ││  NAD     NAME AND ADDRESS                         M1
 ││┌ SG41                                             D..2
 │└┴ DOC     DOCUMENT/MESSAGE DETAILS                 M1
 │┌─ SG53                                             R..100
 ││  SCC     SCHEDULING CONDITIONS                    M1
 ││┌ SG54                                             R1
 ││  QTY     QUANTITY                                 M1
 │└┴ DTM     DATE/TIME/PERIOD                         R1
     UNS     SECTION CONTROL                          M1
     UNT     MESSAGE TRAILER                          M1
```

BRANCHING DIAGRAM

```
0 ──┬──────────┬───────────────┬──────────┬──────────┬──── ┌───────┐
    │          │               │          │          │     │   1   │
    │          │               │          │          │     └───────┘
 ┌──────┐  ┌──────┐            │          │          │
 │ UNH  │  │ BGM  │            │          │          │
 ├──┬───┤  ├──┬───┤            │          │          │
1│M │ 1 │  │M │ 1 │         ┌──────┐  ┌──────┐  ┌──────┐
 └──┴───┘  └──┴───┘         │ SG1  │  │ SG2  │  │ SG7  │
                  ┌──────┐  ├──┬───┤  ├──┬───┤  ├──┬───┤
                  │ DTM  │  │A │..3│  │R │..2│  │D │ 1 │
                  ├──┬───┤  ├──┴───┤  ├──┴───┤  ├──┴───┤
                  │M │ 1 │  │ RFF  │  │ NAD  │  │ CUX  │
                  └──┴───┘  ├──┬───┤  ├──┬───┤  ├──┬───┤
                           │M │ 1 │  │M │ 1 │  │M │ 1 │
                           └──┴───┘  └──┴───┘  └──┴───┘
                                     ┌──────┐
                                     │ SG5  │
                                     ├──┬───┤
                                    2│O │ 1 │
                                     ├──┴───┤
                                     │ CTA  │
                                     ├──┬───┤
                                     │M │ 1 │
                                     └──┴───┘
```

```
0  ┌─────┐
   │  1  │─────────────────────────────────────────┬──────────┐
   └─────┘                                    ┌───────────┐ ┌───────────┐
                                              │    UNS    │ │    UNT    │
                                              │ M │   1   │ │ M │   1   │
                                              └───────────┘ └───────────┘

1  ┌───────────┐
   │   SG28    │
   │ R │ ..9999 │
   ├───────────┤
   │    LIN    │
   │ M │   1   │
   └───────────┘
        │
2       ├────────┬────────┬────────┬────────────┬────────────┬────────────┬────────────┐
   ┌───────────┐ ┌───────────┐ ┌───────────┐ ┌───────────┐ ┌───────────┐ ┌───────────┐ ┌───────────┐ ┌───────────┐
   │    PIA    │ │    IMD    │ │    QTY    │ │    ALI    │ │   SG32    │ │   SG33    │ │   SG39    │ │   SG53    │
   │ D │  ..3  │ │ D │   1   │ │ R │   1   │ │ O │   1   │ │ A │   1   │ │ R │  ..3  │ │ O │   1   │ │ R │ ..100 │
   └───────────┘ └───────────┘ └───────────┘ └───────────┘ ├───────────┤ ├───────────┤ ├───────────┤ ├───────────┤
                                                           │    PRI    │ │    RFF    │ │    NAD    │ │    SCC    │
                                                           │ M │   1   │ │ M │   1   │ │ M │   1   │ │ M │   1   │
                                                           └───────────┘ └───────────┘ └───────────┘ └───────────┘
                                                                                            │              │
3                                                                                    ┌───────────┐ ┌───────────┐
                                                                                     │   SG41    │ │   SG54    │
                                                                                     │ D │  ..2  │ │ R │   1   │
                                                                                     ├───────────┤ ├───────────┤
                                                                                     │    DOC    │ │    QTY    │
                                                                                     │ M │   1   │ │ M │   1   │
                                                                                     └───────────┘ └───────────┘
                                                                                                        │
4                                                                                                ┌───────────┐
                                                                                                 │    DTM    │
                                                                                                 │ R │   1   │
                                                                                                 └───────────┘
```
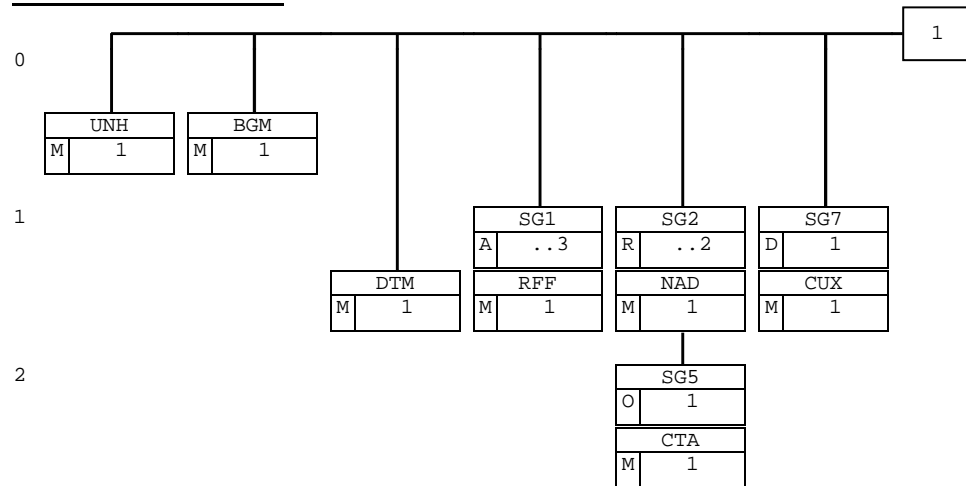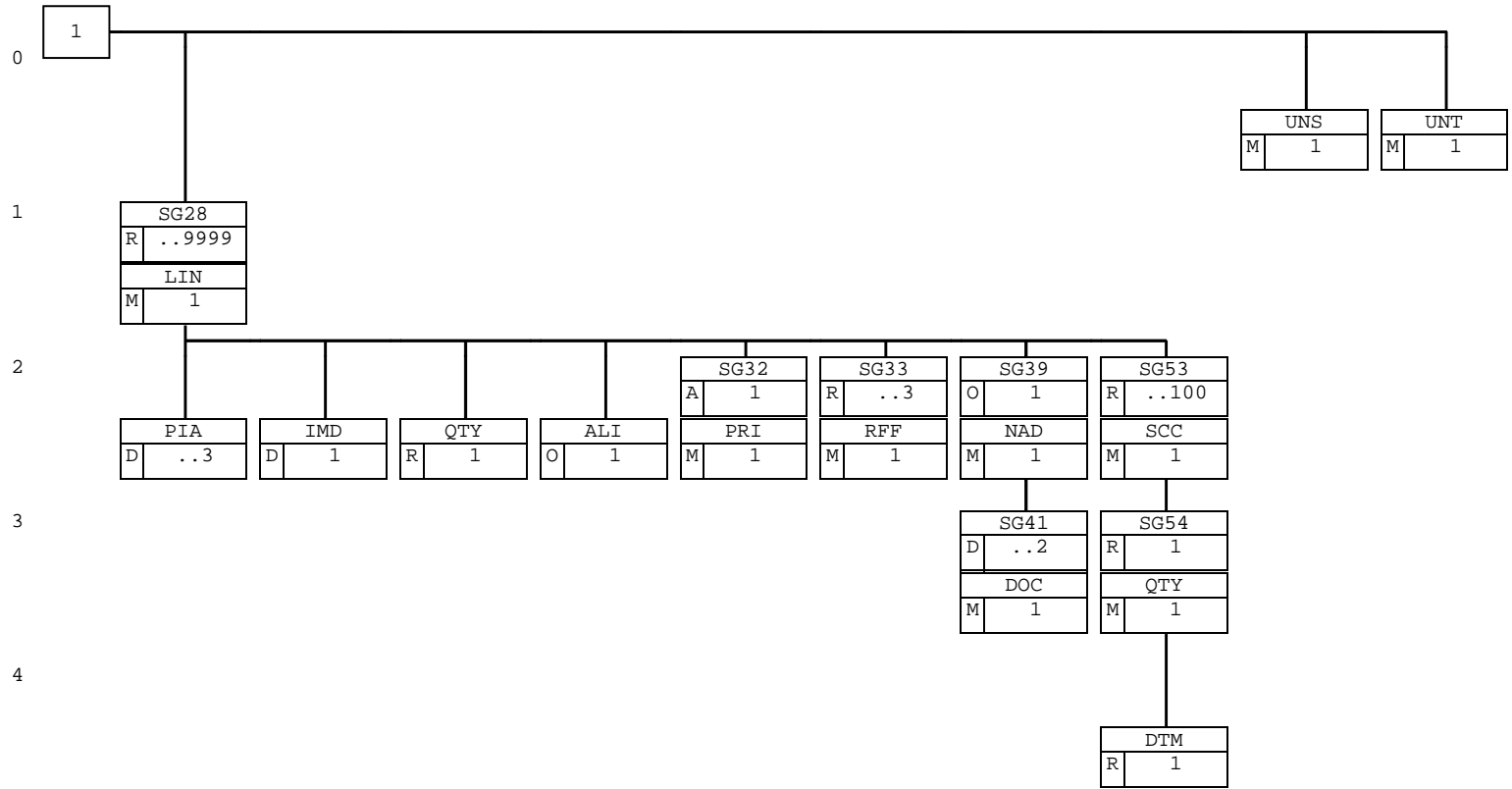
SEGMENT GROUPS/SEGMENTS DESCRIPTION

UNH   MESSAGE HEADER

Function: A service segment heading, and uniquely identifying the message.
Usage   : M1

BGM   BEGINNING OF MESSAGE

Function: A segment uniquely identifying the message by means of its coded name, number and
          function.
Usage   : M1

DTM   DATE/TIME/PERIOD

Function: A segment specifying the date of creation of the message.
Usage   : M1

SG1   RFF

Function: A group of segments referencing documents, relating to the whole message.
Usage   : A..3
Notes   : One RFF segment specifying contract information should be present, preferably at header
          level. If this information is given at detail level, it must not appear here.

RFF   REFERENCE

Function: A segment specifying a document reference number.
Usage   : M1

SG2   NAD-SG5

Function: A group of segments identifying the parties involved and their associated information,
          relevant to the whole message.
Usage   : R..2
Notes   : The NAD segments that identify the buyer and seller must be present.

NAD   NAME AND ADDRESS

Function: A segment identifying the function and coded identification, name and address of a party
          involved.
Usage   : M1

SG5   CTA

Function: A group of segments giving contact details of the specific person or department within
          the identified buying party involved, to whom communication should be directed.
Usage   : O1
Notes   : This segment group will only be used under the NAD identifying the buyer.

CTA   CONTACT INFORMATION

Function: A segment identifying the purchasing contact.
Usage   : M1

SG7   CUX

Function: A group of segments specifying the currency, valid for the whole message.
Usage   : D1
Notes   : The currency must be specified if prices are sent.

CUX   CURRENCIES

Function: A segment specifying the order currency for all prices.
Usage   : M1

SG28   LIN-PIA-QTY-SG32-SG33-SG34-SG39-SG53

Function: A group of segments providing ordering details of the individual line items i.e. ordered
          products.
Usage   : R..9999
Notes   : The PIA segment is dependent on whether the primary reference to the line item being
          ordered is insufficient to identify the item.
          SG34 is used to specify any alternative packaging methods which have been agreed between
          trading partners.

LIN   LINE ITEM

Function: A segment identifying a line item by its item number, and agreed to be the primary
          reference number between the buyer and seller.
          The segment also carries a sequence number assigned to the line item within the message.
Usage   : M1

PIA   ADDITIONAL PRODUCT ID

Function: A segment providing additional identification numbers for the line item.
Usage   : D..3

IMD   ITEM DESCRIPTION

Function: A segment specifying an additional description for the line item.
Usage   : D1

QTY   QUANTITY

Function: A segment specifying the total ordered quantity for the line item.
Usage   : R1

ALI   ADDITIONAL INFORMATION

Function: A segment indicating the country of origin for the line item
Usage   : O1

SG32   PRI

Function: A group of segments specifying pricing information for the line item.
Usage   : A1
Notes   :

PRI   PRICE DETAILS

Function: A segment specifying the line item price and the qualifying information.
Usage   : M1

SG33   RFF

Function: A group of segments specifying references for the line item.
Usage   : R..3
Notes   : The buyer's original line item reference number must be sent.

RFF   REFERENCE

Function: A segment specifying the line item reference number as given by the buyer, or a document
          reference number.
Usage   : M1

SG39   NAD-SG41

Function: A group of segments identifying the buyer and their associated information, for the line
          item.
Usage   : O1
Notes   :

NAD   NAME AND ADDRESS

Function: A segment identifying the buyer as the party requesting the certificate, for the line
          item.
Usage   : M1

SG41   DOC

Function: A group of segments specifying the certificate of conformity.
Usage   : D..2
Notes   :

DOC   DOCUMENT/MESSAGE DETAILS

Function: A segment specifying the requested certificate.
Usage   : M1

SG53   SCC-SG54

Function: A group of segments specifying firm scheduling conditions.
Usage   : R..100
Notes   :

SCC   SCHEDULING CONDITIONS

Function: A segment specifying a firm delivery.
Usage   : M1

SG54   QTY-DTM

Function: A group of segments specifying the delivery dates and quantities scheduled.
Usage   : R1
Notes   :

QTY   QUANTITY

Function: A segment specifying a quantity.
Usage   : M1

DTM   DATE/TIME/PERIOD

Function: A segment specifying the corresponding date of the quantity.
Usage   : R1

UNS   SECTION CONTROL

Function: A service segment separating detail and summary section.
Usage   : M1

UNT   MESSAGE TRAILER

Function: A service segment ending, and providing information for checking the completeness of a
          message.
Usage   : M1

UNH **MESSAGE HEADER**

Function: A service segment heading, and uniquely identifying the message.
Usage   : M1
Notes   : Refer to EDIFICE Utilisation of the UN/EDIFACT Service Segments, Issue 3.

Ref.	Rep.		Name		EDIFICE Utilisation
0062	an..14	M	MESSAGE REFERENCE NUMBER	M	Transmission message count from 1
S009		M	MESSAGE IDENTIFIER	M	
0065	an..6	M	Message type identifier	M	ORDERS
0052	an..3	M	Message type version number	M	D
0054	an..3	M	Message type release number	M	97A
0051	an..2	M	Controlling agency	M	UN
0057	an..6	C	Association assigned code	R	EDPO04
0068	an..35	C	COMMON ACCESS REFERENCE	N	
S010		C	STATUS OF THE TRANSFER	N	
0070	n..2	M	Sequence message transfer number		
0073	a1	C	First/last sequence message transfer indication		

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BGM   BEGINNING OF MESSAGE

Function: A segment uniquely identifying the message by means of its coded name, number and
          function.
Usage   : M1
Notes   :

Ref.	Rep.		Name		EDIFICE Utilisation
C002		C	DOCUMENT/MESSAGE NAME	R	
1001	an..3	C	Document/message name, coded	R	220 = Order
1131	an..3	C	Code list qualifier	N	
3055	an..3	C	Code list responsible agency, coded	N	
1000	an..35	C	Document/message name	N	
C106		C	DOCUMENT/MESSAGE IDENTIFICATION	R	
1004	an..35	C	Document/message number	R	Purchase order number
1056	an..9	C	Version	N	
1060	an..6	C	Revision number	N	
1225	an..3	C	MESSAGE FUNCTION, CODED	R	9 = Original
					42 = Confirmation via specific means
					For confirmation of a purchase order
					already transmitted by other means
4343	an..3	C	RESPONSE TYPE, CODED	N	

DTM   DATE/TIME/PERIOD

Function: A segment specifying the date of creation of the message.
Usage : M1
Notes :

Ref.	Rep.		Name		EDIFICE Utilisation
C507		M	DATE/TIME/PERIOD	M	
2005	an..3	M	Date/time/period qualifier	M	137 = Document/message date/time
					Date when the document is created
2380	an..35	C	Date/time/period	R	Purchase order date
2379	an..3	C	Date/time/period format qualifier	R	102 = CCYYMMDD

SG1   **RFF**

RFF   **REFERENCE**

Function: A segment specifying a document reference number.
Usage   : M1
Notes   :

Ref.	Rep.		Name		EDIFICE Utilisation
C506		M	REFERENCE	M	
1153	an..3	M	Reference qualifier	M	CT = Contract number
					GC = Government contract number
					PR = Price quote number
1154	an..35	C	Reference number	R	
1156	an..6	C	Line number	N	
4000	an..35	C	Reference version number	N	

NAD   NAME AND ADDRESS

Function: A segment identifying the function and coded identification, name and address of a party
         involved.
Usage : M1
Notes : It is advised that the party identification CO C082 be used. When CO C082 cannot be used
         it is recommended to use the structured name and address CO C080 through DE 3207 rather
         than the unstructured one CO C058.

Ref.	Rep.		Name		EDIFICE Utilisation
3035	an..3	M	PARTY QUALIFIER	M	BY = Buyer
					DP = Delivery party
C082		C	PARTY IDENTIFICATION DETAILS	A	
3039	an..35	M	Party id. identification	M	
1131	an..3	C	Code list qualifier	N	
3055	an..3	C	Code list responsible agency,	R	91 = Assigned by seller or seller's agent
			coded		92 = Assigned by buyer or buyer's agent
C058		C	NAME AND ADDRESS	D	
3124	an..35	M	Name and address line	M	
3124	an..35	C	Name and address line	O	
3124	an..35	C	Name and address line	O	
3124	an..35	C	Name and address line	O	
3124	an..35	C	Name and address line	O	
C080		C	PARTY NAME	D	
3036	an..35	M	Party name	M	
3036	an..35	C	Party name	O	
3036	an..35	C	Party name	O	
3036	an..35	C	Party name	O	
3036	an..35	C	Party name	O	
3045	an..3	C	Party name format, coded	N	
C059		C	STREET	D	
3042	an..35	M	Street and number/p.o. box	M	
3042	an..35	C	Street and number/p.o. box	O	
3042	an..35	C	Street and number/p.o. box	O	
3042	an..35	C	Street and number/p.o. box	O	
3164	an..35	C	CITY NAME	D	
3229	an..9	C	COUNTRY SUB-ENTITY	D	
			IDENTIFICATION		
3251	an..9	C	POSTCODE IDENTIFICATION	D	
3207	an..3	C	COUNTRY, CODED	D	Use ISO 3166, 2 alpha code

CTA   CONTACT INFORMATION

Function: A segment identifying the purchasing contact.
Usage : M1
Notes :

Ref.	Rep.		Name		EDIFICE Utilisation
3139	an..3	C	CONTACT FUNCTION, CODED	R	PD = Purchasing contact
C056		C	DEPARTMENT OR EMPLOYEE DETAILS	R	If a code is available use DE 3413, otherwise use DE 3412.
3413	an..17	C	Department or employee identification	D	
3412	an..35	C	Department or employee	D	

CUX   CURRENCIES

Function: A segment specifying the order currency for all prices.
Usage : M1
Notes :

Ref.	Rep.		Name	EDIFICE Utilisation
C504		C	CURRENCY DETAILS	R
6347	an..3	M	Currency details qualifier	M 2 = Reference currency
6345	an..3	C	Currency, coded	R Use ISO 4217, 3 alpha code
6343	an..3	C	Currency qualifier	R 9 = Order currency
6348	n..4	C	Currency rate base	N
C504		C	CURRENCY DETAILS	N
6347	an..3	M	Currency details qualifier	
6345	an..3	C	Currency, coded	
6343	an..3	C	Currency qualifier	
6348	n..4	C	Currency rate base	
5402	n..12	C	RATE OF EXCHANGE	N
6341	an..3	C	CURRENCY MARKET EXCHANGE, CODED	N

LIN   LINE ITEM

Function: A segment identifying a line item by its item number, and agreed to be the primary
          reference number between the buyer and seller.
          The segment also carries a sequence number assigned to the line item within the message.
Usage : M1
Notes :

Ref.	Rep.		Name		EDIFICE Utilisation
1082	an..6	C	LINE ITEM NUMBER	R	It is required to assign a number to the line items within a message. The number is assigned by the sender of the message. The first line item within a message will be numbered 1 and further line items will be incremented by 1 for each new line.
1229	an..3	C	ACTION REQUEST/NOTIFICATION, CODED	N	
C212		C	ITEM NUMBER IDENTIFICATION	R	
7140	an..35	C	Item number	R	Primary reference
7143	an..3	C	Item number type, coded	R	BP = Buyer's part number VP = Vendor's (seller's) part number
1131	an..3	C	Code list qualifier	N	
3055	an..3	C	Code list responsible agency, coded	R	91 = Assigned by seller or seller's agent 92 = Assigned by buyer or buyer's agent
C829		C	SUB-LINE INFORMATION	N	
5495	an..3	C	Sub-line indicator, coded		
1082	an..6	C	Line item number		
1222	n..2	C	CONFIGURATION LEVEL	N	
7083	an..3	C	CONFIGURATION, CODED	N	

PIA   ADDITIONAL PRODUCT ID

Function: A segment providing additional identification numbers for the line item.
Usage   : D..3
Notes   : The 5 internal repetitions of CO C212 may be used, but EDIFICE recommends to only use the
          first occurrence.

Ref.	Rep.		Name		EDIFICE Utilisation
4347	an..3	M	PRODUCT ID. FUNCTION QUALIFIER	M	1 = Additional identification
C212		M	ITEM NUMBER IDENTIFICATION	M	
7140	an..35	C	Item number	R	
7143	an..3	C	Item number type, coded	R	BP = Buyer's part number
					EC = Engineering change level
					VP = Vendor's (seller's) part number
1131	an..3	C	Code list qualifier	N	
3055	an..3	C	Code list responsible agency, coded	R	91 = Assigned by seller or seller's agent
					92 = Assigned by buyer or buyer's agent
C212		C	ITEM NUMBER IDENTIFICATION	O	As for first CO C212
7140	an..35	C	Item number	R	
7143	an..3	C	Item number type, coded	R	
1131	an..3	C	Code list qualifier	N	
3055	an..3	C	Code list responsible agency, coded	R	
C212		C	ITEM NUMBER IDENTIFICATION	O	As for first CO C212
7140	an..35	C	Item number	R	
7143	an..3	C	Item number type, coded	R	
1131	an..3	C	Code list qualifier	N	
3055	an..3	C	Code list responsible agency, coded	R	
C212		C	ITEM NUMBER IDENTIFICATION	O	As for first CO C212
7140	an..35	C	Item number	R	
7143	an..3	C	Item number type, coded	R	
1131	an..3	C	Code list qualifier	N	
3055	an..3	C	Code list responsible agency, coded	R	
C212		C	ITEM NUMBER IDENTIFICATION	O	As for first CO C212
7140	an..35	C	Item number	R	
7143	an..3	C	Item number type, coded	R	
1131	an..3	C	Code list qualifier	O	
3055	an..3	C	Code list responsible agency, coded	R	

IMD   ITEM DESCRIPTION

Function: A segment specifying an additional description for the line item.
Usage   : D1
Notes   :

Ref.	Rep.		Name		EDIFICE Utilisation
7077	an..3	C	ITEM DESCRIPTION TYPE, CODED	D	F = Free-form
7081	an..3	C	ITEM CHARACTERISTIC, CODED	N	
C273		C	ITEM DESCRIPTION	D	
7009	an..17	C	Item description identification	N	
1131	an..3	C	Code list qualifier	N	
3055	an..3	C	Code list responsible agency, coded	N	
7008	an..35	C	Item description	D	Description
7008	an..35	C	Item description	O	
3453	an..3	C	Language, coded	N	
7383	an..3	C	SURFACE/LAYER INDICATOR, CODED	N	

QTY   QUANTITY

Function: A segment specifying the total ordered quantity for the line item.
Usage   : R1
Notes   : The quantity given here must be the sum of the underlying QTY segments of SG54.
          The measure unit qualifier used in DE 6411 applies to all the underlying QTY segments.

Ref.	Rep.		Name		EDIFICE Utilisation
C186		M	QUANTITY DETAILS	M	
6063	an..3	M	Quantity qualifier	M	21 = Ordered quantity
6060	n..15	M	Quantity	M	
6411	an..3	C	Measure unit qualifier	R	PCE = piece

ALI   ADDITIONAL INFORMATION

Function: A segment indicating the country of origin for the line item
Usage : O1
Notes :

Ref.	Rep.		Name		EDIFICE Utilisation
3239	an..3	C	COUNTRY OF ORIGIN, CODED	R	Use ISO 3166, 2 alpha code
9213	an..3	C	TYPE OF DUTY REGIME, CODED	N	
4183	an..3	C	SPECIAL CONDITIONS, CODED	N	
4183	an..3	C	SPECIAL CONDITIONS, CODED	N	
4183	an..3	C	SPECIAL CONDITIONS, CODED	N	
4183	an..3	C	SPECIAL CONDITIONS, CODED	N	
4183	an..3	C	SPECIAL CONDITIONS, CODED	N	

SG32   PRI

PRI   PRICE DETAILS

Function: A segment specifying the line item price and the qualifying information.
Usage   : M1
Notes   :

Ref.	Rep.		Name		EDIFICE Utilisation
C509		C	PRICE INFORMATION	R	
5125	an..3	M	Price qualifier	M	AAA = Calculation net
5118	n..15	C	Price	R	
5375	an..3	C	Price type, coded	R	CT = Contract
5387	an..3	C	Price type qualifier	N	
5284	n..9	C	Unit price basis	R	
6411	an..3	C	Measure unit qualifier	R	PCE = piece
5213	an..3	C	SUB-LINE PRICE CHANGE, CODED	N	

RFF **REFERENCE**

Function: A segment specifying the line item reference number as given by the buyer, or a document
          reference number.
Usage   : M1
Notes   : Where the buyer's line item reference number is to be specified use DE 1156 qualified by
          code 'LI' in DE 1153.
          For all other references use DE 1154 with the relevant qualifier. If this information is
          given at header level it must not appear here.

Ref.	Rep.		Name		EDIFICE Utilisation
C506		M	REFERENCE	M	
1153	an..3	M	Reference qualifier	M	LI = Line item reference number Buyer's original line item number
1154	an..35	C	Reference number	D	
1156	an..6	C	Line number	D	Within an order this must be a unique number which will be the key for identification of the line item. The number is assigned by the buyer, and it can only be assigned once during the lifetime of the order. It will be used, where needed, to refer to the original line item on any subsequent transactions relating to the order. Normally, the first line number on an order will be numbered 1 and further line items will be incremented by 1 for each new line.
4000	an..35	C	Reference version number	N	

NAD   NAME AND ADDRESS

Function: A segment identifying the buyer as the party requesting the certificate, for the line
         item.
Usage : M1
Notes :

Ref.	Rep.		Name		EDIFICE Utilisation
3035	an..3	M	PARTY QUALIFIER	M	BY = Buyer
C082		C	PARTY IDENTIFICATION DETAILS	N	
3039	an..35	M	Party id. identification		
1131	an..3	C	Code list qualifier		
3055	an..3	C	Code list responsible agency, coded		
C058		C	NAME AND ADDRESS	N	
3124	an..35	M	Name and address line		
3124	an..35	C	Name and address line		
3124	an..35	C	Name and address line		
3124	an..35	C	Name and address line		
3124	an..35	C	Name and address line		
C080		C	PARTY NAME	N	
3036	an..35	M	Party name		
3036	an..35	C	Party name		
3036	an..35	C	Party name		
3036	an..35	C	Party name		
3036	an..35	C	Party name		
3045	an..3	C	Party name format, coded		
C059		C	STREET	N	
3042	an..35	M	Street and number/p.o. box		
3042	an..35	C	Street and number/p.o. box		
3042	an..35	C	Street and number/p.o. box		
3042	an..35	C	Street and number/p.o. box		
3164	an..35	C	CITY NAME	N	
3229	an..9	C	COUNTRY SUB-ENTITY IDENTIFICATION	N	
3251	an..9	C	POSTCODE IDENTIFICATION	N	
3207	an..3	C	COUNTRY, CODED	N	

DOC   **DOCUMENT/MESSAGE DETAILS**

Function: A segment specifying the requested certificate.
Usage   : M1
Notes   :

Ref.	Rep.		Name		EDIFICE Utilisation
C002		M	DOCUMENT/MESSAGE NAME	M	
1001	an..3	C	Document/message name, coded	R	2 = Certificate of conformity
1131	an..3	C	Code list qualifier	N	
3055	an..3	C	Code list responsible agency, coded	N	
1000	an..35	C	Document/message name	N	
C503		C	DOCUMENT/MESSAGE DETAILS	N	
1004	an..35	C	Document/message number		
1373	an..3	C	Document/message status, coded		
1366	an..35	C	Document/message source		
3453	an..3	C	Language, coded		
3153	an..3	C	COMMUNICATION CHANNEL IDENTIFIER, CODED	N	
1220	n..2	C	NUMBER OF COPIES OF DOCUMENT REQUIRED	O	
1218	n..2	C	NUMBER OF ORIGINALS OF DOCUMENT REQUIRED	N	

SCC

SCC   SCHEDULING CONDITIONS

Function: A segment specifying a firm delivery.
Usage : M1
Notes :

Ref.	Rep.		Name		EDIFICE Utilisation
4017	an..3	M	DELIVERY PLAN STATUS INDICATOR, CODED	M	1 = Firm
4493	an..3	C	DELIVERY REQUIREMENTS, CODED	N	
C329		C	PATTERN DESCRIPTION	N	
2013	an..3	C	Frequency, coded		
2015	an..3	C	Despatch pattern, coded		
2017	an..3	C	Despatch pattern timing, coded		

QTY   QUANTITY

Function: A segment specifying a quantity.
Usage   : M1
Notes   :

Ref.	Rep.		Name		EDIFICE Utilisation
C186		M	QUANTITY DETAILS	M	
6063	an..3	M	Quantity qualifier	M	21 = Ordered quantity
6060	n..15	M	Quantity	M	
6411	an..3	C	Measure unit qualifier	N	

SG54   QTY-DTM

DTM   DATE/TIME/PERIOD

Function: A segment specifying the corresponding date of the quantity.
Usage   : R1
Notes   :

Ref.	Rep.		Name		EDIFICE Utilisation
C507		M	DATE/TIME/PERIOD	M	
2005	an..3	M	Date/time/period qualifier	M	2 = Delivery date/time, requested
					Date on which buyer requests goods
					to be delivered
2380	an..35	C	Date/time/period	R	
2379	an..3	C	Date/time/period format qualifier	R	102 = CCYYMMDD

UNS   SECTION CONTROL

Function: A service segment separating detail and summary section.
Usage   : M1
Notes   :

Ref.	Rep.		Name		EDIFICE Utilisation
0081	a1	M	SECTION IDENTIFICATION	M	S = Detail/summary section separation

UNT   **MESSAGE TRAILER**

Function: A service segment ending, and providing information for checking the completeness of a
          message.
Usage   : M1
Notes   : Refer to EDIFICE Utilisation of the UN/EDIFACT Service Segments, Issue 3.

Ref.	Rep.		Name		EDIFICE Utilisation
0074	n..6	M	NUMBER OF SEGMENTS IN A MESSAGE	M	Count of all segments in the message, UNH and UNT included.
0062	an..14	M	MESSAGE REFERENCE NUMBER	M	Must be the same reference number as in DE 0062 of the UNH segment of this message.

EXAMPLES

Example 1: Original Purchase Order

```
UNH+1+ORDERS:D:97A:UN:EDPO04'
BGM+220+PO11223+9'                      Purchase order number
DTM+137:19980212:102'                   Document/message date
RFF+CT:9999'                            Contract number
NAD+BY+AABBCC::92'                      Buyer
CTA+PD+:RICHARD JOHNSON'                Purchasing contact
NAD+DP+FACTORYA::92'                    Delivery party
CUX+2:USD:9'                            Reference and order currency
LIN+1++ITEM222:BP::92'                  Buyer's part number
PIA+1+12345:VP::91'                     Vendor's part number
QTY+21:3000:PCE'                        Total quantity ordered 3000
PRI+AAA:5.50:CT::1:PCE'                 Contract price per piece 5.5
RFF+LI::37'                             Line item reference number
SCC+1'                                  Firm order
QTY+21:2000'                            Scheduled quantity 2000
DTM+2:19980401:102'                     Delivery date
SCC+1'                                  Firm order
QTY+21:1000'                            Scheduled quantity 1000
DTM+2:19980408:102'                     Delivery date
UNS+S'
UNT+21+1'
```