

**FINAL
UN EDIFACT ORDERS
MESSAGE ASSESSMENT**

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**Prepared for the
DOD CALS IDE PROJECT**

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1.0 INTRODUCTION

This report represents the final results of ManTech's message assessment for Task 3 of the Department of Defense (DoD) Computer-aided Acquisition and Logistics Support (CALS) Integrated Data Environment (IDE) project. This *Final UN EDIFACT ORDERS Message Assessment* provides a general assessment of the United Nations (UN) Electronic Data Interchange For Administration, Commerce, and Transport (EDIFACT) ORDERS message structure, syntax, and semantics. Four additional reports will follow this deliverable, which include the following:

1. Strategy and test plan for testing the UN EDIFACT ORDERS message prototype.
2. Test analysis report documenting the results of the prototype testing.
3. Strategy document for reaching out to industry and informing companies of migration plans for EDIFACT.
4. Information package supporting the outreach strategy.

The following section provides an overview of the events that necessitated the development of the UN EDIFACT ORDERS message prototype and testing in DoD. A brief background and explanation of Task 3 is also included.

1.1 Overview and Background

The President, via Executive Order (1994), initiated a major program to improve federal purchasing with Electronic Data Interchange (EDI) technology. In response to this initiative, federal agencies have begun to build upon industry successes with United States X12 EDI standards, and to use electronic techniques to accomplish smaller Government procurements (e.g., purchase orders, request for quotes, quotes, etc.). Concurrent with these activities, several larger U.S. firms are expressing interest in accelerating migration to United Nations "EDIFACT" standards for international data interchange. The United States has committed to a process alignment between the domestic American National Standards Institute (ANSI) X12 EDI standard, and the international UN EDIFACT standard. The EDIFACT standard is primarily used in Europe and to a limited extent in Pacific Rim countries. However, in order for everyone to benefit from a single global EDI standard, ANSI X12 agreed to a gradual alignment with EDIFACT in 1997. The ANSI X12 alignment plan allows for administrative alignment and technical migration to UN EDIFACT. Due to this migration and acceptance of UN EDIFACT standards in Europe, Japan, South Korea, Australia, other countries, and the North Atlantic Treaty Organization (NATO), representatives of DoD and federal procurement organizations have intensified efforts to migrate business functionality pertaining to ANSI X12 EDI purchase orders to EDIFACT.

In light of this move, the business functionality of both the DoD and the federal procurement organization's *purchase orders* process will be tested using a prototype implementation of the UN EDIFACT ORDERS message. The specific objective of this task is to test the ORDERS message within the context of Basic Ordering Agreements and simple delivery orders, such as an Order for Supplies or Services - Optional Form 347 (OF347). In this initial report the UN

EDIFACT ORDERS message is assessed from the syntax and semantics perspective. (See the glossary and Appendix A: Abbreviations and Acronyms).

1.2 Approach

The U.S. DoD has completed work through the Pan American EDIFACT Board (PAEB) to augment the ORDERS message in order to satisfy DoD requirements. Changes to the ORDERS message will have an impact on this task, and we must continue to be sensitive to this issue. Future versions of this report will reflect any changes triggered by the next release of the ORDERS message.

Analysis of the ORDERS message involves many areas of complexity, including a well-defined and organized understanding of the ORDERS message and EC/EDI systems. Our approach to assessing the ORDERS message will follow the steps outlined below.

- Compare ANSI X12 and UN EDIFACT message and envelope structures.
- Perform syntactical and semantic analysis of ORDERS message.
- Assess ORDERS message functionality in the context of a basic ordering agreement (see Appendix D) and simple delivery order, OF347. (See Appendix E.)

2.0 UN EDIFACT ORDERS MESSAGE ASSESSMENT

Standard data formats are required to accommodate the transfer of information between different computer systems. In the case of the ORDERS message, the standard data format is the UN EDIFACT standard. This standard identifies formatting (structure, syntax, sequence, and content), as well as semantic meaning and relationships needed to ensure cross platform compatibility of EDI interchanges. In order to gain a detailed understanding of the ORDERS message, this section provides a structural assessment of UN EDIFACT messages, as well as assessing the functionality of the ORDERS message.

2.1 UN EDIFACT Message Structure

Before conducting a functional assessment of the ORDERS message, it is necessary to understand the basic structure of a UN EDIFACT message. Figure 2.1-1 illustrates the message structure of an ANSI X12 transaction set and the way it relates to the UN EDIFACT message.

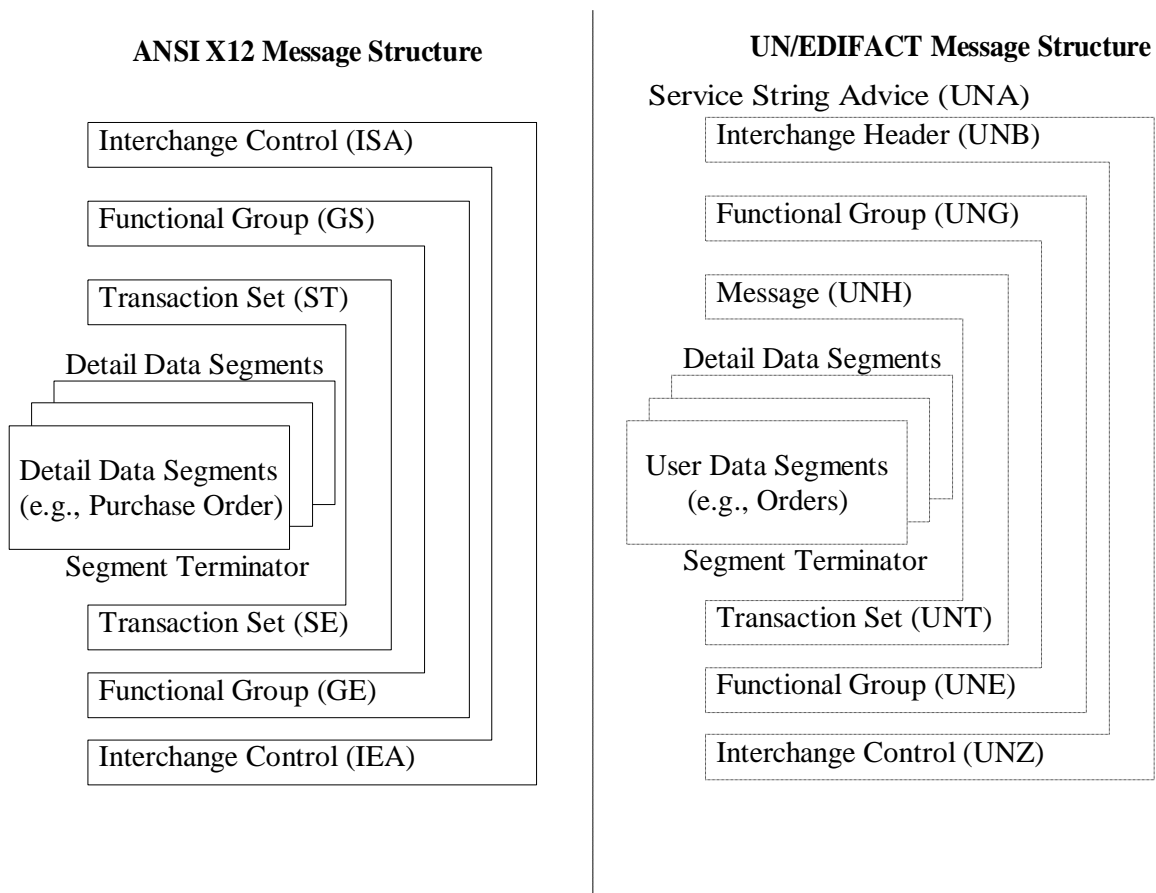


Figure 2.1-1 ANSI X12 and UN EDIFACT Message Structure

Aside from a nearly identical message structure, there are other similarities:

- Tagged and delimited American Standard Code for Information Interchange (ASCII) character strings used for encoding messages to specify the structure and content of the data.
- Utilizes a data dictionary of standard (global) business data elements and data segments.
- Predefined message types exist to use combinations of data elements to create standard messages, which are composed of a specified sequence of data segments.

Although there are basic similarities between the ANSI X12 transaction set and UN EDIFACT message, there are some fundamental variances, due to different message/transaction design philosophies. The variances are highlighted below.

- The syntax rules of the ANSI X12 and UN EDIFACT messages vary greatly. For example the messages are delimited and terminated using different character sets and rules. Looping and nesting conventions vary also.
- Six data element types are defined in ANSI X12, while there are only three for EDIFACT. For ANSI X12, the following six data element types exist:
 1. Numeric
 2. Decimal
 3. Identifier
 4. String
 5. Date
 6. Time

For EDIFACT, the following three data element types exist:

1. Numeric
 2. Alphabetic
 3. Alphanumeric
- EDIFACT allows for two levels of syntax, transmitting this information in the optional Service String Advice UNA or UNB segment.
 - EDIFACT uses two condition/requirement designators - Mandatory and Conditional, while ANSI X12 uses four - Mandatory, Optional, Relational (Conditional), and Floating (though usage is limited).
 - EDIFACT makes extensive use of composite data elements, while ANSI X12 composite data element use is infrequent.

In summary, at the macro level, the interchange structure is very similar, however at the micro level the structure is significantly different. The variance in the way segments and data elements are structured is large enough that these two standards are not easily interchangeable. Frequently, multiple X12 data elements are needed to define a single EDIFACT data element, which leads to a mapping scheme that is MANY to ONE.

2.2 Comparison of ANSI X12 Envelope Structure to UN EDIFACT

The ANSI X12 and UN EDIFACT envelope structures are very similar. At the segment and data element level however, ManTech's comparison revealed the following:

- Both ANSI X12 and UN EDIFACT envelope structures contain an Interchange Control level header segment (ISA/UNB) with a matching trailer segment (IEA/UNZ).
- Both contain a Functional Group header segment (GS/UNG) with a matching trailer segment (GE/UNE).
- Both contain a Transaction Set/Message level header segment (ST/UNH) with a matching trailer segment (SE/UNT)

There are also functional differences between the two structures. EDIFACT uses Service String Advice to transmit data, which specifies data element and component data element separators, the segment terminator, release indicator, and decimal notation. This data is optionally transmitted as part of the EDI interchange and it allows for two levels of syntax - Level A (UNA) and Level B (UNB), which are identical in all respects except for the character sets used. (See Appendix B)

Figure 2.2-1 illustrates a comparison between the ANSI X12 and UN EDIFACT envelope structures in a cross-reference format.

2.3 UN EDIFACT ORDERS Message Functional Assessment

In order to understand the *business functions* supported by the ORDERS message, it is important to examine and assess the functionality of the *entities* and *relationships* within the standard EDI message.

A detailed study of the UN EDIFACT ORDERS message Version 97A revealed there are 60 segment groups that are divided into three sections that are the standard taxonomy for UN EDIFACT messages. The sections are the header, detail, and summary sections. There are approximately 46 data segments (refer to Table 2.3-1) used in the ORDERS message, Version D.97A which are in turn used to make up the 60 segment groups previously mentioned. It is important to analyze the segments at the segment group level, because each group is constructed for a particular semantic meaning. An excerpt from the 97A version of UN EDIFACT Draft Recommendation for the ORDERS message, which provides the semantic descriptions of the purpose for each segment group, is provided in Appendix C.

Table 2.3-1 Data Segments Used in ORDERS Message

Data Segment	Segment Name
ALC	Allowance or charge
ALI	Additional information
APR	Additional price information
BGM	Beginning of message
CAV	Characteristic value
CCI	Characteristic/class id
CNT	Control total
COM	Communication contact
CTA	Contact information
CUX	Currencies
DGS	Dangerous Goods
DOC	Document/message details
DTM	Date/time/period
EQD	Equipment details
FII	Financial institution information
FTX	Free text
GIN	Goods identity number
GIR	Related identification numbers
HAN	Handling instructions
IMD	Item description
LIN	Line item
LOC	Place/location identification
MEA	Measurements
MOA	Monetary amount
NAD	Name and address
PAC	Package

Data Segment	Segment Name
PAI	Payment instructions
PAT	Payment terms basis
PCD	Percentage details
PCI	Package identification
PIA	Additional product id
PRI	Price details
QTY	Quantity
QVR	Quantity variances
RCS	Requirements and conditions
RFF	Reference
RNG	Range details
RTE	Rate details
SCC	Scheduling conditions
STG	Stages
TAX	Duty/tax/fee details
TDT	Details of transport
TOD	Terms of delivery or transport
UNH	Message header
UNS	Section control
UNT	Message trailer

A functional assessment of the UN EDIFACT ORDERS message reveals that the ORDERS message allows a buyer to order one or more goods, items, or services. The purchase order may refer to goods, items, or services related to one or more delivery schedules, delivery locations, etc. A purchase order for cross-border transactions may contain additional information for customs and/or statistical purposes. A purchase order may contain details for transport and destination, as well as delivery patterns. After examination of the *Segment Groups*, *Segments*, and *Data Elements* for the header, detail, and trailer sections of the ORDERS message, particular business functions supported have been identified and include the following four primary functional areas:

1. Packaging, Handling, Shipping, and Transportation.
2. Product Characteristics.
3. Financial.
4. Rules, Laws, and Regulations.

The ORDERS message supports the following functions:

- A buyer may order one or more goods, items, or services.
- A purchase order may refer to goods, items, or services related to one or more delivery schedules, delivery locations, etc.
- A purchase order for cross-border transactions may contain additional information for customs and/or statistical purposes.
- A purchase order may contain details for transport and destination, as well as delivery patterns.

3.0 UN EDIFACT MAPPING MODEL OF OPTIONAL FORM 347

OF347, Order for Supplies or Services, is a standard procurement instrument in the DoD and the federal Government. OF347 was chosen as a model to illustrate an implementation convention of the UN EDIFACT ORDERS message, mapping guidelines for a simple purchase/delivery order. An implementation guideline was created for a simple purchase/delivery order. Selected EDI segments, segment groups, data elements, and composite data elements necessary to convey the information required for this form are illustrated in the mapping results (see Appendix F). A numbered legend that compares the EDI selections to option numbers from the form can be found in Appendix G of this document and an EDI formatted model of the resulting output data can be found in Appendix H.

All options on the OF347 may not necessarily be transmitted on a typical EDI purchase document. Information such as "Business Class" that does not have a matching EDIFACT data element, could be conveyed within the FTX, Free Text segment. Although the use of this segment is acceptable, note that *free text data* is not machine-processable. In computer to computer exchanges, such text will normally require the receiver to process this segment manually.

The OF347 is a manually input paper document; therefore, options such as Page Total Quantity serve no purpose after the document had been translated into an EDI message. In addition, security measures would need to be considered before data such as an authorized signature would be transmitted.

Additionally, information from the OF347 such as the place of inspection, acceptance, or the quantity accepted would not traditionally be known until after processing a purchasing document. Information such as this may need to be transmitted via another type of EDI message such as an order response, an invoice, or possibly a dispatch advice.

4.0 SUMMARY AND CONCLUSIONS

The U.S. DoD has completed work through PAEB augmenting the ORDERS message to satisfy DoD-peculiar requirements. A comparative analysis of the UN EDIFACT and ANSI X12 message revealed a nearly identical structure (enveloping structure) for the two message formats. In spite of these similarities, the syntax, syntax rules, and semantic differences between the two standards are significant. These differences in syntax and semantics have resulted in arduous complexity when trying to establish maps to interchange data between the two standards. The analysis of the ORDERS message revealed that the message might be reduced to four primary functional areas, which include the following:

1. Packaging, Handling, Shipping and Transportation.
2. Product Characteristics.
3. Financial.
4. Rules, Laws, and Regulations.

The ORDERS message is comprised of approximately 46 data segments (refer to Table 2.3-1), which are in turn used to make up the 60 segment groups. Semantic definitions for the complete set of segments and segment groups are provided in Appendix C.

OF347 was selected because it is widely used within the U.S. Federal Government and DoD as a standard instrument for issuing simple purchases of supplies or services. An implementation convention of this form was developed within UN EDIFACT guidelines of the ORDERS message and an assessment was completed for comparison of the ANSI X12 structure to the UN EDIFACT structure. Consideration was also given to syntax and semantic features of this transaction set/message. The results of this assessment will be used for the test development effort, identified in the pending UN EDIFACT ORDERS Message Implementation and Test Plan.

5.0 REFERENCES

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“Electronic Data Interchange Implementation and Transition Road Map,” prepared for the Office of the Secretary of Defense (OSD) CALs Integrated Weapon System Database (IWSDB) Project, March 1995.

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6.0 GLOSSARY

American National Standards Institute (ANSI) - The principal standards coordination body in the United States. ANSI is a member of the International Organization for Standardization (ISO).

Basic Ordering Agreement (BOA) - A written instrument of understanding negotiated between an agency, contracting activity, or contracting office and a contractor. A basic ordering agreement contains terms and clauses applying to future contracts (orders) between the parties during its term, a specific description of supplies or services to be provided, and methods for pricing, issuing, and delivering future orders. A basic ordering agreement is not a contract.

Data Element - A data element is the smallest, meaningful piece of information in a business transaction. It may condense lengthy descriptive information into a short code. Equivalent to a data field in a paper document; a series of data elements are used to build a data segment. Where appropriate, the code is part of Accredited Standards Committee (ASC) X12 or UN EDIFACT standards.

Data Element Delimiter - A separating character, such as an asterisk (*), that precedes each data element within a segment.

Data Element Dictionary - A data element dictionary is a publication that lists all of the data elements used within EDI standards and provides definitions of the data elements.

Data Segment - A data segment is a group of related data elements in a transaction set. Each segment has a unique segment identifier, a combination of two or three uppercase letters and/or digits that serves as a name for the segment and occupies the first character positions of the segment. A segment is equivalent to a data record in a database.

Electronic Commerce (EC) - EC is the paperless exchange of business information (goods and services) or ideas using Electronic Data Interchange (EDI), Electronic Mail (E-Mail), electronic bulletin boards, Electronic Funds Transfer (EFT), facsimile, video conference, and other similar technologies.

Electronic Data Interchange (EDI) - EDI is the computer-to-computer exchange of business transaction information in a public standard format.

Functional Acknowledgment - An ANSI ASC X12 Transaction Set (997) that is produced by translation software upon receiving and validating an EDI transaction set and then sent to the sender.

Implementation Convention - An implementation convention is a subset of the X12 standard that represents the common practices and/or interpretations of the use of X12 standards. Conventions define how trading partners will use the standards to accommodate their mutual needs. An implementation convention should exist for each EDI transaction set that is to be used. An implementation convention deals with transaction sets at the data element level. For the Government, or any industry sector, implementation conventions (for doing EDI within that industry) can be highly detailed subsets of the implementation guidelines (for doing EDI within that industry).

Implementation Guideline - The guideline contains instructions on the use of EDI. It provides additional information to assist in conducting EDI. The guideline is intended to provide assistance and it should not be the sole source of information.

Interchange Control Number - A number assigned to an EDI interchange that is unique to both the interchange and the trading partner unique to a particular interchange.

Mapping - The process of manually mapping data elements from User Defined File (UDF) formats to and from corresponding standard EDI transaction sets.

ORDERS Message - Specifies details for goods or services ordered using Electronic Data Interchange (EDI) between trading partners involved in administration, commerce, and transport under conditions agreed upon between the seller and the buyer.

Trading Partner (External) - An external trading partner is non-Government entity with which the U.S. Government exchanges business transactions.

Trading Partner (Internal) - An internal trading partner is an entity of the U.S. Government that exchanges business transactions with another U.S. Government entity.

Trading Partner Agreement (TPA) - A written instrument of understanding, negotiated between EDI trading partners that specifies contractual matters and protocols governing EDI transactions. These are generally used in the private sector among EDI trading partners. Within the federal EDI acquisition context, Trading Partner Instructions (TPIs) are issued by the Government to the vendor community and are used instead of a TPA.

Trading Partners - Trading partners are entities that exchange business transactions.

Transaction Set - A semantically meaningful unit of transaction information exchanged between EDI trading partners. It can be thought of as the electronic counterpart of a paper document that represents a transaction (e.g., an invoice, a bill of lading, or a medical insurance statement).

Translation - A utility that uses the results of the mapping process to automatically convert the data in UDF formats to and from corresponding standard EDI transaction sets.

Value Added Network (VAN) - Generally, commercial entities that transmit, receive, and store EDI transactions on behalf of their customers. VANs may also provide additional services known as Value Added Services (VAS). VANs are also known as third party networks.

Value Added Service (VAS) - A VAS may be a separate commercial organization (also known as an EDI service bureau) that provides EDI-related services, or a VAN that provides extra fee-based services beyond standard VAN services to its customers. Such services may range from translation to "EDI-to-FAX" services to complete EDI-integrated business systems.

APPENDIX A: ABBREVIATIONS AND ACRONYMS

ALC	Allowance or Charge
ALI	Additional Information
ANSI	American National Standards Institute
APR	Additional Price Information
ASC	Accredited Standards Committee
ASCII	American Standard Code for Information Interchange
BGM	Beginning of Message
BOA	Basic Ordering Agreement
CALS	Computer-aided Acquisition and Logistics Support
CAV	Characteristic Value
CCI	Characteristic/Class ID
CDRL	Contract Data Requirements List
CNT	Control Total
COM	Communication contact
CTA	Contract information
CUX	Currencies
DGS	Dangerous Goods
DISA	Defense Information Systems Agency
DOC	Document/message details
DoD	Department of Defense
DTM	Date/Time/Period
EC	Electronic Commerce
ECE	Economic Commission for Europe
EDI	Electronic Data Interchange
EDIFACT	Electronic Data Interchange For Administration, Commerce, and Transport
EFT	Electronic Funds Transfer
EQD	Equipment Details
E-Mail	Electronic Mail
FAR	Federal Acquisition Regulations
FII	Financial Institution Information
FTX	Free Text
GIN	Goods Identity Number
GIR	Related Identification Numbers
HAN	Handling instructions
IDE	Integrated Data Environment
IMD	Item Description
INCOTERMS	International Commercial Terms

ISO	International Organization for Standardization
IWSDB	Integrated Weapon System Database
LIN	Line item
LOC	Place/Location Identification
MEA	Measurements
MOA	Monetary Amounts
NAD	Name and Address
NATO	North Atlantic Treaty Organization
OF347	Optional Form 347
OSD	Office of the Secretary of Defense
PAC	Package
PAEB	Pan American EDIFACT Board
PAI	Payment Instructions
PAT	Payment Terms basis
PCD	Percentage Details
PCI	Package Identification
PIA	Additional Product ID
PRI	Price Details
QTY	Quantity
QVR	Quantity Variances
RCS	Requirements and Conditions
RFF	Reference
RNG	Range details
RTE	Rate details
SCC	Scheduling Conditions
STG	Stages
TAX	Duty/Tax/Fee Details
TDT	Details of Transport
TOD	Terms of Delivery or transport
TPA	Trading Partner Agreement
TPI	Trading Partner Instructions
UDF	User Defined File
UN	United Nations
UNH	message header
UNS	section control
UNT	message trailer

VAN	Value Added Network
VAS	Value Added Service
WP	Working Party

APPENDIX B: APPLICATION LEVEL SYNTAX RULES

APPLICATION LEVEL SYNTAX RULES

Part 4: United Nations Rules for Electronic Data Interchange For Administration, Commerce, and Transport

UN EDIFACT Draft Directory D.97A

Clause 4.0 - Syntax Levels

This international standard specifies Syntax Levels A and B that are identical in all respects except for the character sets used. As requirements for additional syntactical features appear, further levels may be used.

Unless interchange partners agree to use other or additional characters, level A shall use only the character set specified in Clause 5.1, and Level B only the character set specified in Clause 5.2.

The conditional service string advice, UNA, provides the capability to specify the separator and other service characters used in the interchange in case they differ from those in Clause 5.0.

Clause 5.0 - Character Sets

5.1 Level A Character Set

A to Z	Letters, upper case
0 to 9	Numerals
	Space character
.	Full stop (period)
,	Comma
-	Hyphen/minus sign
(Opening parentheses
)	Closing parentheses
/	Oblique stroke (slash)
=	Equals sign
'	Apostrophe is reserved for use as a segment terminator.
+	Plus sign is reserved for use as a segment tag and data element separator.
:	Colon is reserved for use as a component data element separator.
?	Question mark is reserved for use as a release character.
?	Question mark when used immediately following one of the characters such as ' + : ? restores the character to its normal meaning. Example: 10?+10=20 means 10+10=20. Another example: ?? restores the normal meaning of question mark.

5.2.1 Level B Character Set

This character set is not intended for transmission to telex machines.

A to Z	Letters, upper case
a to z	Letters, lower case
0 to 9	Numerals
character	Space
stop .	Full
,	Comma
sign -	Hyphen/minus
(Opening parentheses
)	Closing parentheses
/	Oblique stroke (slash)
'	Apostrophe
+	Plus sign
:	Colon
=	Equals sign
?	Question mark
%	Percentage sign
&	Ampersand
*	Asterisk
;	Semi-colon
<	Less-than sign
>	Greater-than sign

APPENDIX C: SEGMENT GROUP SEMANTIC DESCRIPTION, VERSION D.97A

HEADER SECTION		
POSITION	TAG NAME	DESCRIPTION
0010	UNH Message header	A service segment starting and uniquely identifying a message. The message type code for the Purchase order message is ORDERS.
0020	BGM Beginning of message	A segment by which the sender must uniquely identify the order by means of its name and number and when necessary its function.
0030	DTM Date/time/period	A segment specifying general dates and, when relevant, times related to the whole message. The segment must be specified at least once to identify the order date. Examples of the use of this DTM segment include Lead times that apply to the whole of the Order and, if no schedule is to be specified, the delivery date. The Date/time/period segment within other Segment groups should be used whenever the date/time/period requires to be logically related to another specified data item. For example: payment due date is specified within the PAT Segment group.
0040	PAI Payment instructions	A segment requesting or confirming conditions of payment, guarantee and method of payment for the whole order. An example of the use of this segment is to specify that a documentary credit will be used.
0050	ALI Additional information	A segment indicating special conditions related to the total order owing to origin, customs preference, or other commercial factors.
0060	IMD Item description	A segment providing a description common to all line items of the order.
0070	FTX Free text	A segment with free text information, in coded or clear form, used when additional information is needed but cannot be accommodated within other segments. In computer to computer exchanges, such text will normally require the receiver to process this segment manually.
0080	Segment Group 1 RFF-DTM	A group of segments for giving references and where necessary, their dates, relating to the whole message e.g., contract number, import/export license number, and reservation number.
0090	RFF Reference	A segment identifying the reference by its number and a line number, where appropriate, within a document.
0100	DTM Date/time/period	A segment specifying the date/time related to the reference.
0110	Segment Group 2 NAD-LOC-FII-SG3-SG4-SG5	A group of segments identifying the parties with associated information.

LEGEND:

HEADER SECTION
DETAIL SECTION
SUMMARY SECTION

HEADER SECTION		
POSITION	TAG NAME	DESCRIPTION
0120	NAD Name and address	A segment identifying names and addresses of the parties, in coded or clear form, and their functions relevant to the order. Identification of the seller and buyer parties is mandatory for the order message. It is recommended that where possible, only the coded form of the party ID should be specified. For example, the Buyer and Seller are known to each other, thus only the coded ID is required, but the Consignee or Delivery address may vary and would have to be clearly specified, preferably in structured format.
0130	LOC Place/location identification	A segment giving more specific location information of the party specified in the NAD segment e.g., internal site/building number.
0140	FII Financial institution information	A segment identifying the financial institution (e.g., bank) and relevant account numbers for the seller, buyer, and where necessary other parties. Example: the buyer may provide a choice of financial institutions for direct debit purposes.
0150	Segment Group 3 RFF-DTM	A group of segments giving references only relevant to the specified party rather than the whole order.
0160	RFF Reference	A segment identifying the reference by its number and a line number, where appropriate, within a document.
0170	DTM Date/time/period	A segment specifying the date and/or time related to the reference.
0180	Segment Group 4 DOC-DTM	A group of segments identifying the documentary requirements of the specified party.
0190	DOC Document/message details	A segment identifying and providing information relating to the documents required by the party specified by the NAD segment. For example, the party may require a Certificate of Analysis.
0200	DTM Date/time/period	A segment specifying the date and/or time of the document.
0210	Segment Group 5 CTA-COM	A group of segments giving contact details of the specific person or department within the party identified in the NAD segment.
0220	CTA Contact information	A segment to identify a person or department, and their function, to whom communications should be directed.
0230	COM Communication contact	A segment to identify a communications type and number for the contact specified in the CTA segment.
0240	Segment Group 6 TAX-MOA-LOC	A group of segments specifying tax related information, and when necessary, the location(s) to which that tax information relates.
0250	TAX Duty/tax/fee details	A segment specifying a tax type, category, rate, or an exemption that relates to the whole order. Example: Value Added Tax at the standard rate is applicable for all items.

LEGEND:

HEADER SECTION
DETAIL SECTION
SUMMARY SECTION

HEADER SECTION		
POSITION	TAG NAME	DESCRIPTION
0260	MOA Monetary amount	A segment specifying the amount for the identified tax/fee.
0270	LOC Place/location identification	A segment indicating the location to which the tax or exemption specified in the TRI segment applies e.g., city, state, or country.
0280	Segment Group 7 CUX-PCD-DTM	A group of segments specifying the currencies and related dates/periods valid for the whole order. Currency data may be omitted in national applications but will be required for international transactions.
0290	CUX Currencies	A segment identifying the currencies required in the order e.g., the order currency. A rate of exchange may be given to convert a reference currency into a target currency.
0300	PCD Percentage details	A segment specifying the fluctuation beyond those limits will allow one or either party to re-negotiate prices.
0310	DTM Date/time/period	A segment specifying the date/time/period related to the rate of exchange.
0320	Segment Group 8 PAT-DTM-PCD-SG9	A segment group specifying the terms of payment and accounting classifications applicable to the entire message.
0330	PAT Payment terms basis	A segment identifying the payment terms and date/time basis.
0340	DTM Date/time/period	A segment giving the specific date/time/period, if needed, of any payments, discounts, or installments, etc.
0350	PCD Percentage details	A segment specifying the discount, interest, penalty as well as installment percentage.
0360	Segment Group 9 MOA-GIR	A group of segments identifying accounting classification reference number data and the related monetary amount at the header level.
0370	MOA Monetary amount	A segment specifying amounts related to payment discounts, penalties or installments.
0380	GIR Related identification numbers	A segment providing related accounting classification reference number data.
0390	Segment Group 10 TDT-SG11	A group of segments identifying the mode and means of transport, location and relevant dates and times for transportation, relating to the whole order.
0400	TDT Details of transport	A segment specifying the mode, means and identification of the transport for the goods being ordered. If required, the carrier's address should be indicated within the NAD Segment Group.
0410	Segment Group 11 LOC-DTM	A group of segments giving the location and date/time information relative to the transportation.
0420	LOC Place/location identification	A segment identifying locations relevant to the transport specified in the TDT segment e.g., place of departure or border crossing point.

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HEADER SECTION		
POSITION	TAG NAME	DESCRIPTION
0430	DTM Date/time/period	A segment identifying the date/time details of departure and/or arrival of the transported goods for the specified location.
0440	Segment Group 12 TOD-LOC	A group of segments indicating the terms of delivery for the whole order.
0450	TOD Terms of delivery or transport	A segment identifying the delivery terms to be used. For example, UN International Commercial Terms (INCOTERMS) code could be used to specify the delivery terms.
0460	LOC Place/location identification	A segment identifying locations relevant to the delivery terms specified in the TOD segment.
0470	Segment Group 13 PAC-MEA-SG14	A group of segments identifying the packaging, physical dimensions and marks and numbers for goods referenced by the whole order.
0480	PAC Package	A segment that specifies the number and type of packages for the whole order. For example the number of pallets and the type.
0490	MEA Measurements	A segment specifying physical measurements of packages described in the PAC segment e.g., package length, weight.
0500	Segment Group 14 PCI-RFF-DTM-GIN	A group of segments specifying the markings and labels on individual physical units.
0510	PCI Package identification	A segment specifying markings and labels used on individual physical units (packages) described in the PAC segment.
0520	RFF Reference	A segment identifying the master label number
0530	DTM Date/time/period	A segment specifying the dates relevant to the package markings.
0540	GIN Goods identity number	A segment identifying the number or ranges of numbers for use with the package markings.
0550	Segment Group 15 EQD-HAN-MEA-FTX	A group of segments providing information relating to equipment identification and ownership, handling and identification of hazardous materials, relating to the whole order.
0560	EQD Equipment details	A segment to define information regarding equipment to be used in conjunction with the whole order, and if required, to indicate responsibility for supply of the equipment.
0570	HAN Handling instructions	A segment providing information on required handling of materials and additionally, if required, identifying hazardous materials in the whole order.
0580	MEA Measurements	A segment providing measurement information for the equipment.

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POSITION	TAG NAME	DESCRIPTION
0590	FTX Free text	A segment with free text information, in coded or clear form, used when additional information is needed but cannot be accommodated within other segments. In computer to computer exchanges, such text will normally require the receiver to process this segment manually.
0600	Segment Group 16 SCC-FTX-RFF-SG17	A group of segments specifying requested delivery schedules relating to quantities, frequencies, dates, and references, required for the whole order.
0610	SCC Scheduling conditions	A segment specifying the type and status of the schedule being given, and optionally defining a pattern to be established e.g., firm or proposed delivery schedule for a weekly pattern.
0620	FTX Free text	Segments with free text information, in coded or clear form, to give further clarification to scheduling instructions. In computer to computer exchanges, such text will normally require the receiver to process this segment manually.
0630	RFF Reference	A segment for specifying the reference for schedule.
0640	Segment Group 17 QTY-DTM	A group of segments to specify the scheduled quantities, date/time of the schedule, and where required, the reference of the schedule.
0650	QTY Quantity	A segment to specify pertinent quantities relating to the schedule and pattern established in the SCC segment, e.g., delivery quantity.
0660	DTM Date/time/period	A segment indicating the date/time details relating to the quantity and schedule used to indicate date/time ranges e.g., start and end dates for a delivery pattern, or delivery window.
0670	Segment Group 18 APR-DTM-RNG	A group of segments providing information concerning pricing related to the type of trade, and where appropriate, indication of quantities, dates/periods or amounts.
0680	APR Additional price information	A segment to identify additional pricing information such as a price multiplier, the class or type of trade and additionally identifying the reason for any changes.
0690	DTM Date/time/period	A segment to identify the date/time/period information related to the price change e.g., period of validity.
0700	RNG Range details	A segment to identify the quantity or amount ranges to which the additional price information applies.

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HEADER SECTION		
POSITION	TAG NAME	DESCRIPTION
0710	Segment Group 19 ALC-ALI-DTM-SG20-SG21- SG22-SG23-SG24	A group of segments specifying allowances and charges for the whole order. The allowance or charge specified within this Segment group. It may relate to the total order, in which case it cannot be overridden at detail level. Alternatively, it can relate to the line items as a default allowance/charge and can be overridden by the ALC Segment group within the detail section. Where relevant, additional information, tax and alternate currency details are to be indicated in the TRI and MOA segments. The basis for the calculation of the allowance/charge may be a quantity, a percentage, an amount or a rate and one of the Segment group 19-22 should be used accordingly.
0720	ALC Allowance or charge	A segment identifying the charge or allowance and, where necessary its calculation sequence.
0730	ALI Additional information	A segment indicating that the allowance or charge specified is subject to special conditions owing to origin, customs preference, or commercial factors.
0740	DTM Date/time/period	A segment to identify the date/time/period information related to the allowance or charge, e.g., period of validity.
0750	Segment Group 20 QTY-RNG	A group of segments specifying the quantity of the allowance or charge with its measure unit specifier. A range to which the allowance or charge applies may be specified e.g. an allowance of a free quantity of 20 pieces may be specified if the goods quantity ordered is greater than 1000 pieces.
0760	QTY Quantity	A segment identifying the type of quantity and the quantity related to the allowance or charge.
0770	RNG Range details	A segment specifying, if required, the range to which the allowance or charge applies.
0780	Segment Group 21 PCD-RNG	A group of segments specifying the percentage for the allowance or charge. For example, the allowance/charge amount is calculated as 5% of the value of the goods, or a price reduction of 5% may be specified if the quantity of goods ordered is within the range of 5 to 10 tons.
0790	PCD Percentage details	A segment identifying the percentage and the percentage basis for the calculation of the allowance or charge.
0800	RNG Range details	A segment specifying, if required, a range for the application of the percentage.

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POSITION	TAG NAME	DESCRIPTION
0810	Segment Group 22 MOA-RNG	A group of segments specifying a monetary amount for an allowance or charge. A range to which the allowance or charge applies can be specified. For example, an allowance of 5000 BEF may be specified if the value of goods ordered is greater than 100000 BEF.
0820	MOA Monetary amount	A segment identifying the monetary amount for the allowance or charge.
0830	RNG Range details	A segment specifying if required a range for the application of the allowance/charge amount.
0840	Segment Group 23 RTE-RNG	A group of segments specifying the rate per unit and basis to which the allowance or charge applies e.g. the allowance/charge amount is 3 DEM per 10 tons.
0850	RTE Rate details	A segment specifying the rate per unit and the basis for calculation.
0860	RNG Range details	A segment specifying, if required the range for the application of the allowance/charge rate.
0870	Segment Group 24 TAX-MOA	A group of segments specifying tax related information for the allowance or charge.
0880	TAX Duty/tax/fee details	A segment specifying the tax type, category and rate, or exemption, related to the allowance or charge.
0890	MOA Monetary amount	A segment specifying the tax amount for the allowance or charge.
0900	Segment Group 25 RCS-RFF-DTM-FTX	A group of segments identifying any rules, laws or regulations with which the supplier must comply to meet requirements e.g. building regulations, safety requirements, etc.
0910	RCS Requirements and conditions	A segment to enable industry or national requirements to be specified.
0920	RFF Reference	A segment identifying the referenced document by its number and a line number where appropriate.
0930	DTM Date/time/period	A segment indicating the date/time details relating to the references.
0940	FTX Free text	A segment with free text information, in coded or clear form, used when additional information is needed but cannot be accommodated within other segments. In computer to computer exchanges, such text will normally require the receiver to process this segment manually.
0950	Segment Group 26 DGS-FTX-SG27	A segment group identifying dangerous goods and hazardous material information with associated points of contact and communications numbers.
0960	DGS Dangerous Goods	A segment identifying dangerous goods and hazardous material information.
0970	FTX Free text	A segment providing free form text information relating to the dangerous goods.

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HEADER SECTION		
POSITION	TAG NAME	DESCRIPTION
0980	Segment Group 27 CTA-COM	Segments group providing contacts and communications numbers associated with the dangerous goods information.
0990	CTA Contact information	A segment identifying to whom communications should be directed concerning dangerous goods.
1000	COM Communication contact	A segment identifying the communication number of the contacts to whom communication should be directed.

DETAIL SECTION		
POSITION	TAG NAME	DESCRIPTION
1010	Segment Group 28 LIN-PIA-IMD-MEA-QTY- PCD-ALI-DTM-MOA-GIN- GIR-QVR-DOC-PAI-FTX- SG29-SG30-SG32-SG33- SG34-SG37-SG38-SG39- SG43-SG49-SG51-SG52- SG53-SG55-SG56-SG58	A group of segments providing details of the individual ordered items. This segment group may be repeated to give sub-line details.
1020	LIN Line item	A segment identifying the line item by the line number and configuration level, and additionally, identifying the product or service ordered. Other product identification numbers e.g., Buyer product number, etc. can be specified within the following PIA segment.
1030	PIA Additional product id	A segment providing either additional identification to the product specified in the LIN segment (e.g., Harmonized System number), or provides any substitute product identification.
1040	IMD Item description	A segment for describing the product or service being ordered as well as product characteristic. This segment should be used for products or services that cannot be fully identified by a product code or article number.
1050	MEA Measurements	A segment enabling the physical measurements of the ordered item to be specified where this is required for full identification of the product. Any measurements must refer to the product in its unpacked form e.g., thickness of plastic film, length, weight, etc.
1060	QTY Quantity	A segment identifying the product quantities e.g., ordered quantity.
1070	PCD Percentage details	A segment specifying the strength or yield of a product as a percentage e.g., 80% to indicate the strength of an acid.
1080	ALI Additional information	A segment indicating that the line item is subject to special conditions owing to origin, customs preference, embargo regulations or commercial factors.

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POSITION	TAG NAME	DESCRIPTION
1090	DTM Date/time/period	A segment specifying date/time/period details relating to the line item only.
1100	MOA Monetary amount	A segment specifying any monetary amounts relating to the product e.g., item amount, insurance value, customs value.
1110	GIN Goods identity number	A segment providing identity numbers to be applied to the goods being ordered e.g., serial numbers for assembled equipment.
1120	GIR Related identification numbers	A segment providing sets of related identification numbers for a line item e.g., engine numbers, chassis number and transmission number for a vehicle.
1130	QVR Quantity variances	A segment identifying order quantity variances, normally specified by the supplier using an Order Response message.
1140	DOC Document/message details	A segment to indicate that a certificate/declaration of origin is required for the ordered article.
1150	PAI Payment instructions	A segment to indicate that where a central buyer is purchasing on behalf of different consignees, the means of payment may differ for each item/consignee combination as specified in segment group 25.
1160	FTX Free text	A segment with free text information, in coded or clear form, used when additional information is needed but cannot be accommodated within other segments. In computer to computer exchanges, such text will normally require the receiver to process this segment manually.
1170	Segment Group 29 CCI-CAV-MEA	A group of segments providing product characteristic and product characteristic details.
1180	CCI Characteristic /class id	A segment to identify product characteristic and, or the characteristic name and characteristic relevance for the business process.
1190	CAV Characteristic value	Segments to specify common product characteristics by value in either coded form or free format.
1200	MEA Measurements	A segment indicating characteristic value being physical measurement (including measurable quantities and percentages) related to specified product characteristics (for example voltage, percentage of material contained) and where relevant measurement ranges.
1210	Segment Group 30 PAT-DTM-PCD-SG31	A group of segments specifying the terms of payment and accounting classifications applicable to the line item.
1220	PAT Payment terms basis	A segment identifying the payment terms and date/time basis.
1230	DTM Date/time/period	A segment giving the specific date/time/period, if needed, of any payments, discounts, installments etc.

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DETAIL SECTION		
POSITION	TAG NAME	DESCRIPTION
1240	PCD Percentage details	A segment specifying the discount, interest, penalty as well as installment percentage.
1250	Segment Group 31 MOA-GIR	A group of segments identifying accounting classification reference number data and related monetary amounts at the line item level.
1260	MOA Monetary amount	A segment specifying amounts related to payment discounts, penalties or installments.
1270	GIR Related identification numbers	A segment providing related accounting identification numbers
1280	Segment Group 32 PRI-CUX APR RNG DTM	A group of segments identifying the relevant pricing information for the goods or services ordered.
1290	PRI Price details	A segment to specify the price type and amount. The price used in the calculation of the line amount will be identified as 'price'.
1300	CUX Currencies	A segment to allow to specify the price in a different currency that in segment group 7.
1310	APR Additional price information	A segment to identify pricing information such as a price multiplier, the class or type of trade and additionally identifying the reason for any changes.
1320	RNG Range details	A segment to identify the ranges (quantity, amount, etc.) to which the additional price information applies.
1330	DTM Date/time/period	A segment to identify the date/time/period information related to the price change e.g., period of validity.
1340	Segment Group 33 RFF-DTM	A group of segments giving references and where necessary, the dates, relating to the line item.
1350	RFF Reference	A segment identifying the reference by its number and a line number within a document where appropriate.
1360	DTM Date/time/period	A segment specifying the date/time related to the reference.
1370	Segment Group 34 PAC-MEA-QTY-DTM-SG35- SG36	A group of segments identifying the packaging, physical dimensions, and marks and numbers for goods referenced in the line item.
1380	PAC Package	A segment specifying the number of packages and the physical type of packaging for the line item e.g., pallet types.
1390	MEA Measurements	A segment specifying physical measurements of packages described in the PAC segment e.g., cube or gross weight.
1400	QTY Quantity	A segment specifying the maximum quantity number of packages that can be stacked safely on another and/or the number of items normally contained within the package.
1410	DTM Date/time/period	A segment to indicate the validity period in relation to the specified article.
1420	Segment Group 35 RFF-DTM	A segment group to give reference to e.g. a packing instruction document relevant to a particular package type and its date/time/period of issue.

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DETAIL SECTION		
POSITION	TAG NAME	DESCRIPTION
1430	RFF Reference	A segment identifying the packing instruction document.
1440	DTM Date/time/period	A segment specifying the dates relevant to the referred document.
1450	Segment Group 36 PCI-RFF-DTM-GIN	A group of segments specifying the markings and labels on individual physical units.
1460	PCI Package identification	A segment specifying markings and labels used on individual physical units (packages) described in the PAC segment.
1470	RFF Reference	A segment identifying the master label number.
1480	DTM Date/time/period	A segment specifying the dates relevant to the package markings.
1490	GIN Goods identity number	A segment identifying the number or ranges of numbers for use with the package markings.
1500	Segment Group 37 LOC-QTY-PCD-DTM	A group of segments specifying destination and quantity details for consignments involving multi-destination deliveries.
1510	LOC Place/location identification	A segment indicating the location to which part of the consignment is to be delivered.
1520	QTY Quantity	A segment specifying the quantity to be delivered to the identified location.
1530	PCD Percentage details	A segment specifying the percentage of the quantity to be delivered to the identified location.
1540	DTM Date/time/period	A segment specifying the dates and/or times that the delivery should be made.
1550	Segment Group 38 TAX-MOA-LOC	A group of segments specifying tax related information, and when necessary, the location(s) to which that tax information relates.
1560	TAX Duty/tax/fee details	A segment specifying a tax type, category and rate, or exemption, relating to the line item.
1570	MOA Monetary amount	A segment specifying the amount for the identified tax/fee.
1580	LOC Place/location identification	A segment indicating the location to which the tax or exemption specified in the TAX segment applies e.g., city or state tax.
1590	Segment Group 39 NAD-LOC-SG40-SG41-SG42	A group of segments identifying the parties with associated information, relevant to the line item only.
1600	NAD Name and address	A segment identifying names and addresses of the parties, in coded or clear form, and their functions relevant to the line item. It is recommended that where possible only the coded form of the party ID should be specified. For example, the Buyer and Seller are known to each other, thus only the coded ID is required, but the Consignee or Delivery address may vary and would have to be clearly specified, preferably in structured format.

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POSITION	TAG NAME	DESCRIPTION
1610	LOC Place/location identification	A segment giving more specific location information of the party specified in the NAD segment e.g., internal site/building number.
1620	Segment Group 40 RFF-DTM	A group of segments giving references only relevant to the specified party rather than the line item.
1630	RFF Reference	A segment identifying the reference by its number and a line number within a document where appropriate.
1640	DTM Date/time/period	A segment specifying the date and/or time related to the reference.
1650	Segment Group 41 DOC-DTM	A group of segments identifying the documentary requirements of the specified party.
1660	DOC Document/message details	A segment identifying and providing information relating to the documents required by the party specified by the NAD segment. For example, the party may require a Certificate of Analysis.
1670	DTM Date/time/period	A segment specifying the date and/or time of the document.
1680	Segment Group 42 CTA-COM	A group of segments giving contact details of the specific person or department within the party identified in the NAD segment.
1690	CTA Contact information	A segment to identify a person or department, and their function, to whom communications should be directed.
1700	COM Communication contact	A segment to identify a communications type and number for the contact specified in the CTA segment.
1710	Segment Group 43 ALC-ALI-DTM-SG44-SG45- SG46-SG47-SG48	A group of segments specifying allowances and charges for the line item where this is different to or not specified within the heading section.
1720	ALC Allowance or charge	A segment identifying the charge or allowance and, where necessary its calculation sequence.
1730	ALI Additional information	A segment indicating that the allowance or charge specified is subject to special conditions owing to origin, customs preference, or commercial factors.
1740	DTM Date/time/period	A segment to identify the date/time/period information related to the allowance or charge, e.g., period of validity.
1750	Segment Group 44 QTY-RNG	A group of segments specifying the quantity of the allowance or charge with its measure unit specifier. A range to which the allowance or charge applies may be specified; e.g., an allowance of a free quantity of 20 pieces may be specified if the goods quantity ordered is greater than 1000 pieces.
1760	QTY Quantity	A segment identifying the type of quantity and the quantity related to the allowance or charge.
1770	RNG Range details	A segment specifying, if required, the range to which the allowance or charge applies.

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POSITION	TAG NAME	DESCRIPTION
1780	Segment Group 45 PCD-RNG	A group of segments specifying the percentage for the allowance or charge. For example, the allowance/charge amount is calculated as 5% of the goods value or a price reduction of 5% may be specified if the goods quantity ordered is within the range 5 tons to 10 tons.
1790	PCD Percentage details	A segment identifying the percentage and the percentage basis for the calculation of the allowance or charge.
1800	RNG Range details	A segment specifying, if required, a range for the application of the percentage.
1810	Segment Group 46 MOA-RNG	A group of segments specifying a monetary amount for an allowance or charge. A range to which the allowance or charge applies can be specified. For example, an allowance of 5000 BEF may be specified if the value of goods ordered is greater than 100000 BEF.
1820	MOA Monetary amount	A segment identifying the monetary amount for the allowance or charge.
1830	RNG Range details	A segment specifying a range, if required, for the application of the allowance/charge amount.
1840	Segment Group 47 RTE-RNG	A group of segments specifying the rate per unit and basis to which the allowance or charge applies e.g. The allowance/charge amount is 3 DEM per 10 tons.
1850	RTE Rate details	A segment specifying the rate per unit and the basis for calculation.
1860	RNG Range details	A segment specifying the range, if required, for the application of the allowance/charge rate.
1870	Segment Group 48 TAX-MOA	A group of segments specifying tax related information for the allowance or charge.
1880	TAX Duty/tax/fee details	A segment specifying the tax type, category and rate, or exemption, related to the allowance or charge.
1890	MOA Monetary amount	A segment specifying the tax amount for the allowance or charge.
1900	Segment Group 49 TDT-SG50	A group of segments identifying the mode and means of transport, location and relevant dates and times for transportation, relating to the line item, where this is different to or not specified within the heading section.
1910	TDT Details of transport	A segment specifying the mode, means and identification of the transport for the goods item being ordered, where this is different to or not specified within the heading section.
1920	Segment Group 50 LOC-DTM	A group of segments giving the location and date/time information relative to the transportation.
1930	LOC Place/location identification	A segment identifying locations relevant to the transport specified in the TDT segment.

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POSITION	TAG NAME	DESCRIPTION
1940	DTM Date/time/period	A segment identifying the date/time details of departure and/or arrival of the transported goods for the specified location.
1950	Segment Group 51 TOD-LOC	A group of segments indicating the terms of delivery for the line item where this is different to or not specified within the heading section.
1960	TOD Terms of delivery or transport	A segment identifying the delivery terms to be used.
1970	LOC Place/location identification	A segment identifying locations relevant to the delivery terms specified in the TOD segment.
1980	Segment Group 52 EQD-HAN-MEA-FTX	A group of segments providing information relating to equipment identification and ownership, handling and notification of hazardous materials, relating to the line item where this is different to or not specified within the heading section.
1990	EQD Equipment details	A segment to define fixed information regarding equipment to be used in conjunction with the ordered item, and to indicate responsibility for supply of the equipment if required, e.g., container identification.
2000	HAN Handling instructions	A segment providing information on required handling of materials and additionally, if required, identifying hazardous materials in the ordered item.
2010	MEA Measurements	A segment providing measurement information for the equipment.
2020	FTX Free text	A segment with free text information, in coded or clear form, to give further clarification, when required, to the equipment and handling details. In computer to computer exchanges, such text will normally require the receiver to process this segment manually.
2030	Segment Group 53 SCC-FTX-RFF-SG54	A group of segments specifying requested delivery schedules relating to quantities, frequencies, and dates, required for the line item, where this is different to or not specified within the heading section.
2040	SCC Scheduling conditions	A segment specifying the type and status of the schedule being given, and optionally defining a pattern to be established e.g., firm or proposed delivery schedule for a weekly pattern.
2050	FTX Free text	A segment with free text information, in coded or clear form, used when additional information is needed but cannot be accommodated within other segments. In computer to computer exchanges, such text will normally require the receiver to process this segment manually.
2060	RFF Reference	A segment for specifying references relevant to a schedule.

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POSITION	TAG NAME	DESCRIPTION
2070	Segment Group 54 QTY-DTM	A group of segments to specify the scheduled quantities, date/time details of the schedule and where required the reference of the schedule.
2080	QTY Quantity	A segment to specify pertinent quantities relating to the schedule and pattern established in the SCC segment e.g., delivery quantity.
2090	DTM Date/time/period	A segment indicating the date/time details relating to the quantity and schedule details in the SCC/QTY segments. This segment may be repeated to indicate date/time ranges, e.g., start and end dates for a delivery pattern, or delivery window.
2100	Segment Group 55 RCS-RFF-DTM-FTX	A group of segments identifying any rules, laws or regulations with which the supplier must comply to meet requirements e.g. building regulations, safety requirements, etc.
2110	RCS Requirements and conditions	A segment to enable industry or national requirements to be specified.
2120	RFF Reference	A segment identifying the referenced document by its number and a line number where appropriate,.
2130	DTM Date/time/period	A segment indicating the date/time details relating to the quantity and schedule details in the SCC/QTY segments. This segment may be repeated to indicate date/time ranges, e.g., start and end dates for a delivery pattern, or delivery window.
2140	FTX Free text	A segment indicating the date/time details relating to the references.
		A segment with free text information, in coded or clear form, used when additional information is needed but cannot be accommodated within other segments. In computer to computer exchanges, such text will normally require the receiver to process this segment manually.
2150	Segment Group 56 STG-SG57	A group of segments indicating information (quantity and amount) for the calculation of the amortization.
2160	STG Stages	A segment providing information related to the kind of stage in a process, the total number of stages and the current stage.
2170	Segment Group 57 QTY-MOA	A group of segment indicating quantity and monetary amount related to STG.
2180	QTY Quantity	A segment giving information on quantity relating to STG.
2190	MOA Monetary amount	A segment giving information on monetary amount relating to STG.
2200	Segment Group 58 DGS-FTX-SG59	A group of segments identifying handling information and dangerous goods and hazardous material information with associated points of contact and communications numbers at the item level.

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POSITION	TAG NAME	DESCRIPTION
2210	DGS Dangerous Goods	A segment identifying dangerous goods and hazardous material information.
2220	FTX Free text	A segment providing free form text information relating to the dangerous goods.
2230	Segment Group 59 CTA-COM	A group of segments providing contacts and communications numbers associated with dangerous goods information.
2240	CTA Contact information	A segment identifying to whom communications should be directed concerning dangerous goods.
2250	COM Communication contact	A segment identifying the communication numbers of the contacts to whom communications should be directed.

SUMMARY SECTION		
POSITION	TAG NAME	DESCRIPTION
2260	UNS Section control	A service segment placed at the start of the summary section to avoid segment collision.
2270	MOA Monetary amount	A segment giving the total amounts for the whole order message.
2280	CNT Control total	A segment by which control totals may be provided by the sender for checking by the receiver.
2290	Segment Group 60 ALC-ALI-MOA	A group of segments specifying allowances and charges summary totals for the order.
2300	ALC Allowance or charge	A segment identifying the charge or allowance type to be summarized.
2310	ALI Additional information	A segment indicating that allowance or charge specified is subject to special conditions owing to origin, customs preference, or commercial factors.
2320	MOA Monetary amount	A segment specifying the summary amount for the allowance or charge.
2330	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.

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APPENDIX D: BASIC ORDERING AGREEMENT DESCRIPTION

16.703 Basic Ordering Agreements

A. Description

A basic ordering agreement is a written instrument of understanding, negotiated between an agency, contracting activity, or contracting office and a contractor, that contains the following:

1. Terms and clauses applying to future contracts (orders) between the parties during its term.
2. A description, as specific as practicable, of supplies or services to be provided.
3. Methods for pricing, issuing, and delivering future orders under the basic ordering agreement. A basic ordering agreement is not a contract.

B. Application

A basic ordering agreement may be used to expedite contracting for uncertain requirements for supplies or services when specific items, quantities, and prices are not known at the time the agreement is executed, but a substantial number of requirements for the type of supplies or services covered by the agreement are anticipated to be purchased from the contractor. Under proper circumstances, the use of these procedures can result in economies in ordering parts for equipment support by reducing administrative lead-time, inventory investment, and inventory obsolescence due to design changes.

C. Limitations

A basic ordering agreement shall not state or imply any agreement by the Government to place future contracts or orders with the contractor, or be used in any manner to restrict competition.

1. Each basic ordering agreement shall:
 - i. Describe the method for determining prices to be paid to the contractor for the supplies or services.
 - ii. Include delivery terms and conditions or specify how they will be determined.
 - iii. List one or more Government activities authorized to issue orders under the agreement.
 - iv. Specify the point at which each order becomes a binding contract (e.g., issuance of the order, acceptance of the order in a specified manner, or failure to reject the order within a specified number of days).
 - v. Provide that failure to reach agreement on price for any order issued before its price is established (see Paragraph (d)(3) of this section) is a dispute under the Disputes clause included in the basic ordering agreement.
 - vi. If fast payment procedures will apply to orders, include the special data required by 13.303(b).
2. Each basic ordering agreement shall be reviewed annually before the anniversary of its effective date and revised as necessary to conform to the requirements of this regulation. Basic ordering agreements may need to be revised before the annual

review due to mandatory statutory requirements. A basic ordering agreement shall be changed only by modifying the agreement itself and not by individual orders issued under it. Modifying a basic ordering agreement shall not retroactively affect orders previously issued under it.

D. Orders

A contracting officer representing any Government activity listed in a basic ordering agreement may issue orders for required supplies or services covered by that agreement.

1. Before issuing an order under a basic ordering agreement, the contracting officer shall:
 - i. Obtain competition in accordance with Part 6.
 - ii. If the order is being placed after competition, ensure that use of the basic ordering agreement is not prejudicial to other offerors.
 - iii. Sign or obtain any applicable justifications and approvals, and any determination and findings, and comply with other requirements in accordance with 1.602-1(b), as if the order were a contract awarded independently of a basic ordering agreement.
2. Contracting officers shall:
 - i. Issue orders under basic ordering agreements on Optional Form (OF) 347, Order for Supplies or Services, or on any other appropriate contractual instrument.
 - ii. Incorporate by reference the provisions of the basic ordering agreement.
 - iii. If applicable, cite the authority under 6.302 in each order.
 - iv. Comply with 5.203 when synopsis is required by 5.201.
3. The contracting officer shall neither make any final commitment nor authorize the contractor to begin work on an order under a basic ordering agreement until prices have been established, unless the order establishes a ceiling price limiting the Government's obligation and either:
 - i. The basic ordering agreement provides adequate procedures for timely pricing of the order early in its performance period; or
 - ii. The need for the supplies or services is compelling and unusually urgent (i.e., when the Government would be seriously injured, financially or otherwise, if the requirement is not met sooner than would be possible if prices were established before the work began). The contracting officer shall proceed with pricing as soon as practical. In no event shall an entire order be priced retroactively.

APPENDIX E: EXAMPLE OF OPTIONAL FORM 347

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER	2. CONTRACT NO. <i>(If any)</i>	6. SHIP TO:	
3. ORDER NO.	4. REQUISITION/REFERENCE NO.	a. NAME OF CONSIGNEE	
5. ISSUING OFFICE <i>(Address correspondence to)</i>		b. STREET ADDRESS	
7. TO:		c. CITY	d. STATE
		e. ZIP CODE	
a. NAME OF CONTRACTOR		f. SHIP VIA	
b. COMPANY NAME		8. TYPE OF ORDER	
c. STREET ADDRESS		<input type="checkbox"/> a. PURCHASE	<input type="checkbox"/> b. DELIVERY -- Except
d. CITY		REF YOUR: _____	
e. STATE		Please furnish the following on the terms	
f. ZIP CODE		and conditions specified on both sides of	
9. ACCOUNTING AND APPROPRIATION DATA		this order and on the attached sheet, if	
		any, including delivery as indicated.	
		for billing instructions on the reverse, this	
		delivery order is subject to instructions	
		contained on this side only of this form	
		and is issued subject to the terms and	
		conditions of the above-numbered contract.	
		10. REQUISITIONING OFFICE	

11. BUSINESS CLASSIFICATION *(Check appropriate box(es))*

a. SMALL
 b. OTHER THAN SMALL
 c. DISADVANTAGED
 d. WOMEN-OWNED

12. F.O.B. POINT	14. GOVERNMENT B/L NO.	15. DELIVER TO F.O.B. POINT ON OR BEFORE <i>(Date)</i>	16. DISCOUNT TERMS
13. PLACE OF			
a. INSPECTION	b. ACCEPTANCE		

17. SCHEDULE *(See reverse for Rejections)*

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT	19. GROSS SHIPPING WEIGHT	20. INVOICE NO.			17(h) TOT. <i>(Cont. pages)</i>
	21. MAIL INVOICE TO:					
	a. NAME					
	b. STREET ADDRESS <i>(or P.O. Box)</i>					
c. CITY		d. STATE	e. ZIP CODE			17(i) GRAND TOTAL

22. UNITED STATES OF AMERICA BY <i>(Signature)</i>	23. NAME <i>(Typed)</i>
	TITLE: CONTRACTING/ORDERING OFFICER

AUTHORIZED FOR LOCAL REPRODUCTION

OPTIONAL FORM 347

(REV. 6/95)

Previous edition not usable Computer Generated Prescribed by GSA/FAR 48 CFR 53.213(e)

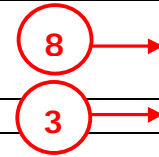
**APPENDIX F: EDI MAPPING OF OPTIONAL FORM 347 -
ORDER FOR SUPPLIES OR SERVICES**

EDI MAPPING OF OPTIONAL FORM 347

(Numbering scheme corresponds with option numbers from OF347. See Appendix G for Numbering Legend)

HEADER INFORMATION						
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
UNH	Message Header	0010			Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments	
0062		Message reference number	M an..14		System assigned control #	
S009	0065	Message type identifier	M an..6	ORDERS	Purchase order message	
	0052	Message type version number	M an..3	D	Draft version UN EDIFACT Directory	
	0054	Message type release number	M an..2	97A	Release 1997-A	
	0051	Controlling agency	M an..2	UN	UN/Economic Commission for Europe (ECE)/TRADE/Working Party (WP).4	
Example string	UNH+0001+ORDERS:D:97A:UN'					
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
BGM	Beginning of Message	0020			Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments	
C002	1001	Document/message name, coded	C an..3	105 640	Purchase Order Delivery Order (alternate use)	
C106	1004	Document/message number	C an..35		Order number	
1225		Message function, codes	C an..3	9 7 31 46	Original Duplicate (retransmission) Copy (information copy) Provisional	
4343		Response type, coded	C an..3	AP AB AD AC RE*	Accepted Message acknowledgment Acknowledge-with detail, no change Acknowledge-w/detail and change Rejected	
Example string	BGM+105+OF347001+9+AP'					

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LEGEND:

HEADER INFORMATION
DETAIL INFORMATION
SUMMARY INFORMATION

HEADER INFORMATION								
Segment	Name		Position	Group		Grp. Rpt	Usage	Max Use
DTM	Date/Time/Period		0030				Mandatory	35
Data Element	Component Element	Name	Attributes	Literal		Comments		
C507	2005	Date/time/period qualifier	M an..3	137 92 7		Document/message date/time Contract effective date Effective date/time		
	2380	Date/time/period	C an..35	1		Message create date		
	2379	Date/time/period format qualifier	C an..3	102 203 711		CCYYMMDD CCYYMMDDHHMM CCYYMMDD - CCYYMMDD (range)		
Example string	DTM+137:199803021535:203'							
Segment	Name		Position	Group		Grp. Rpt	Usage	Max Use
FTX	Free Text Note: Free Text is NOT Machine Processable		0070				Conditional	99
Data Element	Component Element	Name	Attributes	Literal		Comments		
4451		Text subject qualifier	M an..3	AAI ABN ACB PKG		General information Accounting information Additional information Packaging information		
C108	4440	Free text	M an..70	8a		Wording pertaining to specified terms and conditions, Purchase order reference, and/or Delivery reference and instructions. (Maximum iterations: 5)		
	4440	Free text	C an..70	8b				
	4440	Free text	C an..70					
Example string	FTX+AAI+++Purchase Order Reference - please furnish on attached sheet(s), specified terms and conditions and delivery as indicated' Note: Use this example string if Type of Order is a Purchase Order							
Example string	FTX+AAI+++Delivery Order Reference - Except for billing instructions, this delivery order is issued subject to the terms and conditions of the Above-numbered contract' Note: Use this example string if Type of Order is a Delivery Order							

LEGEND:

HEADER INFORMATION
DETAIL INFORMATION
SUMMARY INFORMATION

HEADER INFORMATION						
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
FTX	Free Text Note: Free Text is NOT Machine Processable	0070.1 2 nd iteration			Conditional	99
Data Element	Component Element	Name	Attributes	Literal	Comments	
4451		Text subject qualifier	M an..3	ACP ZZZ	ACP = Statistical title ZZZ = Mutually defined (for use as 'Business Class')	
C107	4441	Free text identification	M an..17	Business Class		
C108	4440	Free text	M an..70		Used for business classes from OF347 - Small, Other than small, Disadvantaged, Women-owned	
Example string		FTX+ACP++Business Class+Other than small'				
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
RFF	Reference	0090	Segment Group 1 - Reference(C)	9999	Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments	
C506	1153	Reference qualifier	M an..3	AAJ CT GC (various)	AAJ = Delivery order number CT = Contract number GC = Government contract number	
	1154	Reference number	C an..35		Contract reference number	
	4000	Reference version number	C an..35		Revision number (optional)	
Example string		RFF+AAJ:CONTRACTNUM12345::1A'				

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LEGEND:

HEADER INFORMATION
DETAIL INFORMATION
SUMMARY INFORMATION

HEADER INFORMATION						
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
RFF (Optional)	Reference	0090.1 2 nd iteration	Segment Group 1 - Reference(C)	9999	Conditional	1
Data Element	Component Element	Name	Attributes	Literal	Comments	
C506	1153	Reference qualifier	M an..3	GN* ZZZ AFL DI IV OH	GN = Government reference # ZZZ = Mutually defined AFL = Associated Invoices DI = Distributor invoice number IV = Invoice number OH = Current invoice number	
	1154	Reference number	C an..35		Requisition/reference number	
	4000	Reference version number	C an..35		Revision number (optional)	
Example string	RFF+GN:REQUISITIONNUMABCD::1B'					
	Note: Use of this segment to determine Invoice number(s) is questionable as this information is typically not known when a Purchase Order is initially created.					

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LEGEND:

HEADER INFORMATION
DETAIL INFORMATION
SUMMARY INFORMATION

HEADER INFORMATION						
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
NAD	Name and Address	0120	Segment Group 2 - NAD (C)	99	Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments	
3035		Party qualifier	M an..3	GV (various)	GV = Procurement responsibility	
C082	3039	Party ID Identification	M an..35		Used for 'Issuing Office' on OF347.	
	1131	Code list qualifier	C an..3	46 160 164 190 (various)	46 = DUNS plus 4 160 = Party identification 164 = Member organizations 190 = Item sourcing category - (CAGE) code.	
C080	3036	Party name	M an..35		Issuing office name	
	3036	Party name (additional)	C an..35		Additional name information (optional)	
C059	3042	Street and number/P.O. Box	M an..35		Issuing office address	
	3042	Street and number (additional)	C an..35		Additional address information	
3164		City name	C an..35		Issuing office city name	
3229		Country sub-entity identification	C an..9		Issuing office state/province name	
3251		Postcode identification	C an..9		Issuing office postal code	
3207		Country, coded	C an..3		Issuing office country, coded	
Example string	NAD+GV+Procurement Office:46+ +George C Marshall Space Flight Center+16 Aerial Way Boulevard Building 6:04+Huntsville+AL+35812+US'					

LEGEND:

HEADER INFORMATION
DETAIL INFORMATION
SUMMARY INFORMATION

HEADER INFORMATION							
Segment	Name		Position	Group	Grp. Rpt	Usage	Max Use
NAD	Name and Address		0120.1 2 nd iteration	Segment Group 2 - NAD (C)	99	Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments		
3035		Party qualifier	M an..3	ST	ST = Ship to		
C082	3039	Party ID Identification	M an..35		Coded ship to name(DUNS#, etc.)		
	1131	Code list qualifier	C an..3	46 160 164 190 (various)	46 = DUNS plus 4 160 = Party identification 164 = Member organizations 190 = Item sourcing category - (CAGE) code.		
C080	3036	Party name	M an..35		Ship to name		
	3036	Party name (additional)	C an..35		Additional Ship to name information (optional)		
C059	3042	Street and number/P.O. Box	M an..35		Ship to address		
	3042	Street and number (additional)	C an..35		Additional ship to address info		
3164		City name	C an..35		Ship to City name		
3229		Country sub-entity identification	C an..9		Ship to state/province name		
3251		Postcode identification	C an..9		Ship to postal code		
3207		Country, coded	C an..3		Ship to country, coded		
Example string	NAD+ST+01001234567:164++Keesler Air Force Base Transportation Office, Chief Procuring Officer:1401 Fisher Street, Loading Dock Number 22B+Keesler Air Force Base+MS+395341401+US'						

LEGEND:

HEADER INFORMATION
DETAIL INFORMATION
SUMMARY INFORMATION

HEADER INFORMATION						
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
LOC (Optional)	Place/Location Identification Used to indicate more specific location info.	0130	Segment Group 2 - NAD (C)	99	Conditional	25
Data Element	Component Element	Name	Attributes	Literal	Comments	
3227		Place/location qualifier	M an..3	1 47	1 = Place of terms of delivery 47 = Region of destination	
C517	3225	Place/location identification	C an..25		Specific location identification, other than 3164 City name.	
	1131	Code list qualifier	C an..3	140 16 156 162 (various)	140 = Area 16 = Postcode directory 156 = Location of goods 162 = Country	
	3055	Code list responsible agency, coded	C an..3	92 ZZZ (various)	92 = Assigned by buyer or buyer's agent ZZZ = Mutually defined	
	3224	Place/location	C an..70		Place/location other than 3164 City	
C519	3223	Related place/location	C an..25		Related specific place/location	
Example string	LOC+1+Keesler AFB Flightline:140:92:Hangar 9+ Bay 4, Level 2'					

LEGEND:

HEADER INFORMATION
DETAIL INFORMATION
SUMMARY INFORMATION

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HEADER INFORMATION							
Segment	Name		Position	Group	Grp. Rpt	Usage	Max Use
NAD	Name and Address		0120.2 3 rd iteration	Segment Group 2 - NAD (C)	99	Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments		
3035		Party qualifier	M an..3	FC	FC = Contractor, main		
C082	3039	Party ID Identification	M an..35		Coded Contractor name - (DUNS#, etc.)		
	1131	Code list qualifier	C an..3	46 160 164 190 (various)	46 = DUNS plus 4 160 = Party identification 164 = Member organizations 190 = Item sourcing category - (CAGE) code.		
C080	3036	Party name	M an..35		Contractor name		
	3036	Party name (additional)	C an..35		Additional Contractor name information (optional)		
C059	3042	Street and number/P.O. Box	M an..35		Contractor address		
	3042	Street and number (additional)	C an..35		Additional contractor address info		
3164		City name	C an..35		Contractor City name		
3229		Country sub-entity identification	C an..9		Contractor state/province name		
3251		Postcode identification	C an..9		Contractor postal code		
3207		Country, coded	C an..3		Contractor country, coded		
Example string	NAD+FC+B&RConst123:160++Mr. Carl Brown, Brown & Root Construction Company+1217 Irish Hill Drive, Post Office :Box 1422+Biloxi+MS+39533+US'						

LEGEND:

HEADER INFORMATION
DETAIL INFORMATION
SUMMARY INFORMATION

HEADER INFORMATION								
Segment	Name		Position	Group	Grp. Rpt	Usage	Max Use	
NAD	Name and Address		0120.3 4 th iteration	Segment Group 2 - NAD (C)	99	Mandatory	1	
Data Element	Component Element	Name	Attributes	Literal	Comments			
3035		Party qualifier	M an..3	AV	AV = Authorizing official (Requisitioning office - OF347)			
C082	3039	Party ID Identification	M an..35		Coded Requisitioning Office name (DUNS#, CAGE code, etc.)			
	1131	Code list qualifier	C an..3	46 160 164 190 (various)	46 = DUNS plus 4 160 = Party identification 164 = Member organizations 190 = Item sourcing category - (CAGE) code.			
C080	3036	Party name	M an..35		Requisitioning/Contracting Officer Name			
	3036	Party name (additional)	C an..35		Additional Requisitioning office name information (optional)			
C059	3042	Street and number/P.O. Box	M an..35	(optional)	Requisitioning office address			
	3042	Street and number (additional)	C an..35	(optional)	Additional Requisitioning office address info			
3164		City name	C an..35	(optional)	Requisitioning office City name			
3229		Country sub-entity identification	C an..9	(optional)	Requisitioning office state/province name			
3251		Postcode identification	C an..9	(optional)	Requisitioning office postal code			
3207		Country, coded	C an..3	(optional)	Requisitioning office country, coded			
Example string		NAD+AV+DoDAACcode:160++Department of Defense Requisitioning Office'						

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LEGEND:

HEADER INFORMATION
DETAIL INFORMATION
SUMMARY INFORMATION

HEADER INFORMATION						
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
NAD	Name and Address	0120.4 5 th iteration	Segment Group 2 - NAD (C)	99	Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments	
3035		Party qualifier	M an..3	DS FW (various)	DS = Distributor FW = Freight forwarder	
C082	3039	Party ID Identification	M an..35		18 → Use for Shipping Point in OF347	
Example string		NAD+DS+ACME Distributors'				
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
NAD	Name and Address	0120.5 6 th iteration	Segment Group 2 - NAD (C)	99	Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments	
3035		Party qualifier	M an..3	IV	IV = Invoicee	
C082	3039	Party ID Identification	M an..35		Send invoice to name, coded	
	1131	Code list qualifier	C an..3	160 46 164 190	160 = Party identification 46 = DUNS+4 164 = Member organizations 190 = Item sourcing category	
C080	3036	Party name	M an..35		21 → Send invoice to name	
C059	3042	Street and number/PO Box	M an..35		Invoicee address	
	3164	City name	C an..35		Invoicee city	
	3229	Country sub-entity identification	C an..9		Invoicee state/province	
	3251	Postcode identification	C an..9		Invoicee postal code	
	3207	Country, coded	C an..3		Invoicee country	
Example string		NAD+IV+Financial Management Office BF50:160++George C Marshall Space Flight Center+16 Aerial Way Boulevard Building 16:04+Huntsville+AL+35812+US'				

LEGEND:

HEADER INFORMATION
DETAIL INFORMATION
SUMMARY INFORMATION

HEADER INFORMATION						
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
RFF	Reference	0160	Segment Group 3 - RFF (C)	99	Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments	
C506	1153	Reference qualifier	M an..3	BM	14	BM = Bill of Lading Number
	1154	Reference number	C an..35			Government Bill of Lading number Used in OF347.
Example string	RFF+BM:BOL1234'					
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
DTM	Date/Time/Period	0170	Segment Group 3 - RFF (C)	99	Conditional	5
Data Element	Component Element	Name	Attributes	Literal	Comments	
C507	2005	Date/time/period qualifier	M an..3	74		74 = Deliver by or before date - (OF347)
	2380	Date/time/period	C an..35		15	Deliver by or before date (OF347)
	2379	Date/time/period format qualifier	C an..3	102		102 = CCYYMMDD
Example string	DTM+74:19980410:102'					

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LEGEND:

HEADER INFORMATION
DETAIL INFORMATION
SUMMARY INFORMATION

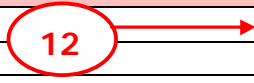
HEADER INFORMATION						
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
PAT	Payment Terms Basis	0330	Segment Group 8 - PAT (C)	10	Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments	
4279	9	Payment terms type qualifier	M an..3	22 6 13 33 (various)	22 = Discount (OF347) 6 = Mixed 13 = Seller to advise buyer 33 = Payment by installments (optional use as Accounting and/or Appropriation data in OF347)	
C110	4277	Terms of payment identification	M an..17		Generic payment terms	
C112	2475	Payment time reference, coded	M an..3	9 (various)	9 = Date invoice received	
	2151	Type of period, coded	C an..3	D (various)	D = Day (agreed or specified period of time, coded)	
	2152	Number of periods	C n..3		Number of days for discount	
Example string		PAT+22+Net 30, 10+9::D:10'				
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
DTM	Date/Time/Period	0340	Segment Group 8 - PAT (C)	10	Conditional	5
Data Element	Component Element	Name	Attributes	Literal	Comments	
C507	2005	Date/time/period qualifier	M an..3	13	13 = Terms net due date	
	2380	Date/time/period	C an..3		Number of days- receipt of invoice to payment	
	2379	Date/time/period format qualifier	C an..3	804	804 = Day	
Example string		DTM+13:30:804'				

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LEGEND:

HEADER INFORMATION
DETAIL INFORMATION
SUMMARY INFORMATION

HEADER INFORMATION							
Segment	Name		Position	Group	Grp. Rpt	Usage	Max Use
TDT	Details of Transport		0400	Segment Group 10 - TDT (C)	10	Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments		
8051		Transport stage qualifier	M an..3	20	20 = Main-carriage transport		
C220	8067	Mode of transport, coded	C an..3	1 2 3 4 8	1 = sea 2 = rail 3 = road 4 = air 8 = inland waterway		
C228	8179	Type of means of transport ID	C an..8	11 23 31 6 (various)	11 = ship 23 = Rail bulk car 31 = Truck 6 = Aircraft		
C040	3127	Carrier identification	C an..17		Carrier ID, coded, if available		
Example string		TDT+20++3+31+OVNT'					
Segment	Name		Position	Group	Grp. Rpt	Usage	Max Use
TOD	Terms of Delivery or Transport		0450	Segment Group 12 - TOD (C)	5	Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments		
C100	4053	Terms of delivery or transport, coded	C an..3		FOB Point, coded		
	4052	Terms of delivery or transport	C an..70		Delivery terms		
Example string		TOD+++FOB:::Freight paid by buyer'					



LEGEND:

HEADER INFORMATION
DETAIL INFORMATION
SUMMARY INFORMATION

HEADER INFORMATION							
Segment	Name		Position	Group	Grp. Rpt	Usage	Max Use
LOC	Place/Location Identification		0460	Segment Group 12 - TOD (C)	5	Conditional	2
Data Element	Component Element	Name	Attributes	Literal	Comments		
3227		Place/location qualifier	M an..3	10 14	10 = Place of acceptance (OF347) 14 = Location of goods		
C517	3225	Place/location identification	C an..25		ID of acceptance place other than 3164 city name.		
Example string		LOC+10+KAFB Main Receiving Dock'					
Segment	Name		Position	Group	Grp. Rpt	Usage	Max Use
PAC	Package		0480	Segment Group 13 - PAC (C)	10	Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments		
C402	7077	Item description type, coded	M an..3	S	S = Structured		
	7064	Type of packages	M an..35		Use to indicate returnable container serial number, if applicable		
Example string		PAC++++S:Seal1234'					
Segment	Name		Position	Group	Grp. Rpt	Usage	Max Use
MEA	Measurements		0490	Segment Group 13 - PAC (C)	10	Conditional	5
Data Element	Component Element	Name	Attributes	Literal	Comments		
6311		Measurement purpose qualifier	M an..3	PL	PL = Package Limitations		
C502	6313	Property measured, coded	C an..3	WT	WT = Weight		
C174	6411	Measure unit qualifier	M an..3	LBS KLG (various)	LBS = Pounds KLG = Kilograms		
	6314	Measurement value	C an..18		Use for Gross Shipping Weight in OF347		
Example string		MEA+PL+WT+LBS:2800'					

LEGEND:

HEADER INFORMATION
DETAIL INFORMATION
SUMMARY INFORMATION

DETAIL INFORMATION						
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
LIN	Line Item	1020	Segment Group 28 - LIN (C)	200000	Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments	
1082		Line item number	C an..6	17a →	Line number	
C212	7140	Item number	C an..35		Use to specify the Federal Supply Classification/Product Service code	
	7143	Item number type, coded	C an..3	AY	AY = Federal supply classification	
Example string	LIN+000001++ItemnumberABC123:AY'					
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
PIA	Additional Product ID	1030	Segment Group 28 - LIN (C)	200000	Conditional	25
Data Element	Component Element	Name	Attributes	Literal	Comments	
4347		Product ID Function qualifier	M an..3	1	1 = additional identification	
C212	7140	Item number	C an..35	17b →	Product ID number	
	7143	Item number type, coded	C an..3	VP AM MF SN (various)	VP = Vendor's (seller's) part number AM = UPC/EAN shipping container code MF = Manufacturer's number SN = Serial number	
Example string	PIA+1+WIDGET001:VP+01234:AM+25WGTA01:MF'					
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
IMD	Item Description	1040	Segment Group 28 - LIN (C)	200000	Conditional	99
Data Element	Component Element	Name	Attributes	Literal	Comments	
7077		Item description type, coded	C an..3	F S X	F = Free-form S = Structured (from Ind. Code list) X = semi-structured (code + text)	
C273	7008	Item description	C an..35		Plain text item description	
Example string	IMD+F+++:::Military issue Widget-01'					

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Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
QTY	Quantity	1060	Segment Group 28 - LIN (C)	200000	Conditional	99
Data Element	Component Element	Name	Attributes	Literal	Comments	
C186	6063	Quantity qualifier	M an..3	21 53 99 (various)	21 = Ordered quantity 53 = Minimum order quantity 99 = Estimated quantity	
	6060	Quantity	M an 15		Quantity ordered in units of issue	
	6411	Measure unit qualifier	C an..3		Indication of the unit of measure	
Example string	QTY+21:25000:EA'					
				17c	→	
				17d	→	
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
QTY (Optional)	Quantity	1060.1 2 nd iteration	Segment Group 28 - LIN (C)	200000	Conditional	99
Data Element	Component Element	Name	Attributes	Literal	Comments	
C186	6063	Quantity qualifier	M an..3	194	194 = Received and accepted qty.	
	6060	Quantity	M an 15		Qty received/accepted in issue units	
	6411	Measure unit qualifier	C an..3		Indication of the unit of measure	
Example string	QTY+194:25000:EA' Note: Use of this segment in regard to 'accepted' quantity is questionable					
				17q	→	
Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
MOA	Monetary Amount	1100	Segment Group 28 - LIN (C)	200000	Conditional	10
Data Element	Component Element	Name	Attributes	Literal	Comments	
C516	5025	Monetary amount type qualifier	M an..3	85	85 = Maximum charge	
	5004	Monetary amount	C n..18		Total line amount	
Example string	MOA+85:75000.00'					
				17f	→	

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Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
PRI	Price Details	1290	Segment Group 32 - PRI (C)	25	Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments	
C509	5125	Price qualifier	M an..3	CAL INF	CAL = Calculation price INF = Information (use to indicate prices other than basic unit price, i.e. quantity price break, etc.)	
	5118	Price	C n..15	17e →	Use to identify unit price of 1020/LIN or to specify prices applicable to basic award instrument requirements	
	5387	Price type qualifier	C an..3	AAQ CAT CON PAQ (various)	AAQ = Firm price CAT = Catalogue price CON = Contract price PAQ = Price break quantity(s)	
	6411	Measure unit qualifier	C an..3		Indication of unit of measure	
Example string	PRI+CAL:3.00::CAT::EA'					

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Segment	Name	Position	Group		Grp. Rpt	Usage	Max Use
UNS	Section Control	2260				Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments		
0081		Section identifier	M a1	S	S = Detail/summary section separation		
Example string		UNS+S'					
Segment	Name	Position	Group		Grp. Rpt	Usage	Max Use
MOA	Monetary Amount	2270				Conditional	12
Data Element	Component Element	Name	Attributes	Literal	Comments		
C516	5025	Monetary amount type qualifier	M an..3	79 128 ZZZ (various)	79 = Total line items amount 128 = Total amount ZZZ = Mutually defined		
	5004	Monetary amount	C n..18		Monetary amount per qualifier		
Example string		MOA+79:85000.00'					
Segment	Name	Position	Group		Grp. Rpt	Usage	Max Use
CNT	Control Total	2280				Conditional	10
Data Element	Component Element	Name	Attributes	Literal	Comments		
C270	6069	Control qualifier	M an..3	1 2	1 = Sum of quantities in QTY/6060 2 = Total number of LIN segments		
	6066	Control value	M n..18		Hash total per control qualifier		
Example string		CNT+2:2'					



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Segment	Name	Position	Group	Grp. Rpt	Usage	Max Use
UNT	Message Trailer	2330			Mandatory	1
Data Element	Component Element	Name	Attributes	Literal	Comments	
0074		Number of segments in a message	M n..6		Control count of message segments	
0062		Message reference number	M an..14		Same number as UNH/0062	
Example string	UNT+34+0001'					

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APPENDIX G: LEGEND FOR NUMBERING SCHEME - OPTIONAL FORM 347

Option Number from OF347	Option Responsibility
1	Date of order
2	Contract number
3	Order number
4	Requisition/reference number
5	Issuing office information
6	Ship to information
7	Contractor information
8 (a,b)	Type of order (Purchase or Delivery)
9	Accounting and appropriation data
10	Requisitioning office information
11	Business classification
12	FOB Point (Freight on board)
13	Place of inspection and acceptance
14	Government Bill of Lading Number
15	Deliver to FOB Point on or before date
16	Discount terms
17a	Line item number
17b	Supplies or Services (Item Reference numbers)
17c	Quantity
17d	Unit of measure
17e	Unit price
17f	Extended price
17g	Quantity accepted
17h	Not needed (page total quantity)
17i	Grand total
18	Shipping Point
19	Gross Shipping Weight
20	Invoice number
21	Invoicee (mail invoice to:) information
22	Not needed at this time (signature)
23	Contracting/Ordering Officer

**APPENDIX H: EDI FORMAT OUTPUT OF ORDERS MESSAGE FOR
OPTIONAL FORM 347**

**EXAMPLE OF EDI FORMAT OUTPUT OF ORDERS MESSAGE
FOR OPTIONAL FORM 347**

UNH+0001+ORDERS:D:97A:UN'
BGM+105+OF347001+9+AP'
DTM+137:199803021535:203'
FTX+AAI+++PURCHASE ORDER REFERENCE - PLEASE FURNISH ON ATTACHED SHEET(S), SPECIFIED
TERMS AND CONDITIONS AND DELIVERY AS INDICATED'
FTX+ACP++BUSINESS CLASS+OTHER THAN SMALL'
RFF+AAJ:CONTRACTNUM12345::1A'
RFF+GN:REQUISITIONNUMABCD::1B'
NAD+GV+PROCUREMENT OFFICE:46++GEORGE C MARSHALL SPACE FLIGHT CENTER+16 AERIAL
WAY BOULEVARD, BUILDING 16:04+HUNTSVILLE+AL+35812+US'
NAD+ST+01001234567:164++KEESLER AIR FORCE BASE TRANSPORTATION OFFICE, CHIEF
PROCURING
OFFICER:1401 FISHER STREET, LOADING DOCK NUMBER 22B+KEESLER AIR FORCE
BASE+MS+39534+US'
LOC+1+KEESLER AFB FLIGHTLINE:140;92:HANGAR 9+BAY 4, LEVEL 2'
NAD+FC+B&RCONST123:160++MR. CARL BROWN, BROWN & ROOT CONSTRUCTION COMPANY+1217
IRISH HILL DRIVE, POST OFFICE:BOX 1422+BILOXI+MS+395331422+US'
NAD+AV+DODAACCODE:160++DEPARTMENT OF DEFENSE REQUISITIONING OFFICE'
NAD+DS+ACME DISTRIBUTORS'
NAD+IV+FINANCIAL MANAGEMENT OFFICE BF50:160++GEORGE C MARSHALL SPACE FLIGHT
CENTER+16
AERIAL WAY BOULEVARD BUILDING 160:4+HUNTSVILLE+AL+35812+US'
RFF+BM:BOL1234'
DTM+74:19980410:102'
PAT+22+NET 30, 10+9::D:10'
DTM+13:30:804'
TDT+20++3+31+OVNT'
TOD+++FOB::FREIGHT PAID BY BUYER'
LOC+10+KAFB MAIN RECEIVING DOCK'
PAC++++S:SEAL1234'
MEA+PL+WT+LBS:2800'
LIN+000001++ITEMNOABC123:AY'
PIA+1+WIDGET001:VP+01234:AM+25WGTA01:MF'
IMD+F++++:MILITARY ISSUE WIDGET'
QTY+21:25000:EA'
QTY+194:25000:EA'
MOA+85:75000.00'
PRI+CAL:3.00::CAT::EA'
LIN+000002++ITEMNOXYZ321:AY'
PIA+1+THNGMAJIG04:VP+01244:AM+57THNGMAJ:MF'
IMD+F++++:MILITARY ISSUE THINGAMAJIG'
QTY+21:4:EA'
QTY+194:4:EA'
MOA+85:10000.00'
PRI+CAL:2500.00::CAT::EA'
UNS+S'
MOA+79:85000.00'
CNT+2:2'
UNT+40+0001'