Joint ISO/TC 154 – UN/CEFACT Syntax Working Group (JSWG) publication of ISO 9735-1

equivalent to the official ISO publication: ISO 9735-1 (First edition 1998-10-01)

Electronic data interchange for administration, commerce and transport (EDIFACT) — Application level syntax rules (Syntax version number: 4) —

Part 1:
Syntax rules common to all parts, together with syntax service directories for each of the parts

Contents

Foreword

This part of ISO 9735 was prepared by the UN/ECE Trade Division (as UN/EDIFACT) and was adopted, under a special "fast-track procedure", by Technical Committee ISO/TC 154, *Documents and data elements in administration, commerce and industry.*

Together with ISO 9735-2, this part of ISO 9735 cancels and replaces ISO 9735:1988 (amended and reprinted in 1990) and Amendment 1:1992.

Whereas this part supersedes the earlier publications, and shall use a version number of "4" in the mandatory data element 0002 (Syntax version number) in the segment UNB (Interchange header), interchanges continuing to use the syntax defined in the earlier published versions shall use the following Syntax version numbers, in order to differentiate them from each other and from this part:

> ISO 9735:1988 — *Syntax version number: 1*
> ISO 9735:1988 (amended and reprinted in 1990) — *Syntax version number: 2*
> ISO 9735:1988 (amended and reprinted in 1990) plus Amendment 1:1992 — *Syntax version number: 3*

ISO 9735 consists of the following parts, under the general title *Electronic data interchange for administration, commerce and transport (EDIFACT) — Application level syntax rules (Syntax version number: 4):*

— *Part 1: Syntax rules common to all parts, together with syntax service directories for each of the parts*

— *Part 2: Syntax rules specific to batch EDI*

— *Part 3: Syntax rules specific to interactive EDI*

— *Part 4: Syntax and service report message for batch EDI (message type - CONTRL)*

— *Part 5: Security rules for batch EDI (authenticity, integrity and non-repudiation of origin)*

— *Part 6: Secure authentication and acknowledgement message (message type - AUTACK)*

— *Part 7: Security rules for batch EDI (confidentiality)*

— *Part 8: Associated data in EDI*

— *Part 9: Security key and certificate management message (message type - KEYMAN)*

Further parts may be added in the future.

Annexes A, B and C form an integral part of this part of ISO 9735.
Annexes D and E are for information only.

Introduction

This part of ISO 9735 includes the rules at the application level for the structuring of data in the interchange of electronic messages in an open environment, based on the requirements of either batch or interactive processing. These rules have been agreed by the United Nations Economic Commission for Europe (UN/ECE) as syntax rules for Electronic Data Interchange for Administration, Commerce and Transport (EDIFACT) and are part of the United Nations Trade Data Interchange Directory (UNTDID) which also includes both batch and interactive Message Design Guidelines.

This part of ISO 9735 may be used in any application, but messages using these rules may only be referred to as EDIFACT messages if they comply with other guidelines, rules and directories in the UNTDID. For UN/EDIFACT, messages shall comply with the message design rules for batch or interactive usage as applicable. These rules are maintained in the UNTDID.

Communications specifications and protocols are outside the scope of this part of ISO 9735.

A previous version of ISO 9735 was published in 1988 as a single part. The current version of ISO 9735 consists of multiple parts and incorporates enhancements to extend its application.

This part of ISO 9735 is a re-draft of corresponding sections in the previous version of ISO 9735. It consists of the rules common to all parts of ISO 9735, and includes the definitions and service directories for all parts.

The basic syntax rules specified in this part remain unchanged from the previous version, with the exception that the coverage of character repertoires has been extended, and two new techniques have been introduced (the provision for 'dependency notes' and the introduction of a service repetition character, to support the capability of permitting multiple occurrences (repeats) of stand-alone and/or composite data elements). Both of these techniques are used in other parts of the current version of ISO 9735, and are available for specification in EDIFACT messages which utilise this International Standard.

In addition, enhancements have been made to the batch interchange; group; and message header segments (UNB; UNG; and UNH).

Character repertoires: Because of the widening use of ISO 9735, it has become necessary to extend its coverage to include all character repertoires covered by ISO 8859, Parts 1-9 *(Information processing — 8-Bit single – byte coded graphic character sets)*; the code extension techniques covered by ISO 2022 (with certain restrictions on its use within an interchange); and partial use of the techniques covered by ISO/IEC 10646-1.

Dependency notes: These provide a formal notation to express relationships in EDIFACT message, segment and composite data element specifications.

Repeating data elements: The specification of multiple occurrences of a message within a group or within an interchange; a group within an interchange; and a segment group and/or a segment within a message, which existed in the previous version of ISO 9735, has been extended in the current version. The additional capability for the specification of multiple occurrences of a stand-alone data element and/or of a composite data element within a segment has been introduced.

UNB - Interchange header segment: This segment has been enhanced to permit the identification of the service code list directory version number; identification of the character encoding scheme; and internal sub-identification of the sender and recipient. In addition, to conform to year 2000 requirements, the date format in this segment has been extended.

UNG - Group header segment: This segment has been re-named and its function changed to permit one or more message types and/or packages to be contained in the group. As a result, certain data elements, which are now redundant, have been marked for deletion. In addition, to conform to year 2000 requirements, the date format in this segment has been extended.

UNH - Message header segment: This segment has been enhanced to permit the identification of a message subset; of a related message implementation guideline; and of a related scenario.

An addition has been made to permit the prevention of collision, by use of the UGH/UGT segment group. This technique shall be used in a message specification when it is not otherwise possible to ensure unambiguous identification of each message segment upon receipt.

Electronic data interchange for administration, commerce and transport (EDIFACT) — Application level syntax rules (Syntax version number: 4) —

Part 1:
Syntax rules common to all parts, together with syntax service directories for each of the parts

1   Scope

This part of ISO 9735 specifies common syntax rules for the formatting of batch and interactive messages to be interchanged between computer application systems. It includes the definitions and service directories for all parts comprising ISO 9735.

2   Conformance

Conformance to a standard means that all of its requirements, including all options, are supported. If all options are not supported, any claim of conformance shall include a statement which identifies those options to which conformance is claimed.

Data that is interchanged is in conformance if the structure and representation of the data conforms to the syntax rules specified in this International Standard.

Devices supporting this International Standard are in conformance when they are capable of creating and/or interpreting the data structured and represented in conformance with the standard.

Conformance shall be based on this part, and at least either ISO 9735-2 or ISO 9735-3.

When identified in this International Standard, provisions defined in related standards shall form part of the conformance criteria.

3   Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 9735. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 9735 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 639:1988, *Code for the representation of names of languages*.

ISO/IEC 646:1991, *Information technology — ISO 7-bit coded character set for information interchange*.

ISO/IEC 2022:1994, *Information technology — Character code structure and extension techniques*.

ISO/IEC 2382-1:1993, *Information technology — Vocabulary — Part 1: Fundamental terms*.

ISO 2382-4:1987, *Information processing systems — Vocabulary — Part 04: Organization of data*.

ISO 6093:1984, *Information processing — Representation of numerical values in character strings for information interchange.*

ISO/IEC 6429:1992, *Information technology — Control functions for coded character sets*.

ISO 6523:1984, *Information technology — Structure for the identification of organizations*.

ISO 8601:1988, *Data elements and interchange formats — Information interchange — Representation of dates and times*.

ISO 9735-2:1998, *Electronic data interchange for administration, commerce and transport (EDIFACT) — Application level syntax rules (Syntax version number: 4) — Part 2: Syntax rules specific to batch EDI.*

ISO 9735-3:1998, *Electronic data interchange for administration, commerce and transport (EDIFACT) — Application level syntax rules (Syntax version number: 4) — Part 3: Syntax rules specific to interactive EDI.*

ISO/IEC 10646-1:1993, *Information technology — Universal Multiple-Octet Coded Character Set (UCS) — Part 1: Architecture and Basic Multilingual Plane.*

4 Definitions

For the purposes of this International Standard, the definitions in annex A apply.

5 Service characters

The service characters are the component data element separator, data element separator, release character, repetition separator, and segment terminator.

The component data element separator, data element separator, repetition separator, and segment terminator delineate various syntax structures as defined in clause 7.

The purpose of the release character is to allow the use of a character that would otherwise be interpreted as a service character. The character immediately following the release character in a interchange shall not be interpreted as a service character.

When used, the release character is not counted in the length of the data element value.

NOTE - Using default service characters shown below, 10?+10=20 appearing in a data transfer shall be interpreted on receipt as 10+10=20. A question mark in a data element value is represented in transfer as ??.

5.1   Default service characters

The default service characters reserved for use in this International Standard are:

Name	Graphic Representation	Functionality
Colon	:	component data element separator
Plus sign	+	data element separator
Question mark	?	release character
Asterisk	*	repetition separator
Apostrophe	'	segment terminator

5.2   UNA, service string advice

The conditional service string advice (UNA) provides the capability to specify the service characters used in the interchange (see annex B). The UNA service string advice shall be used if the service characters differ from the defaults (see clause 5.1). Its use is optional if the default characters are used.

When used, the service string advice shall appear immediately before the interchange header segment.

6   Character repertoires

The character encoding specified in basic code table of ISO/IEC 646 (7-bit coded character set for information interchange) shall be used for the interchange service string advice (if used) and up to and including the composite data element S001 'Syntax identifier' in the interchange header.

The character repertoire used for the characters in an interchange shall be identified from the code value of data element 0001 in S001 'Syntax identifier' in the interchange header (see Annex D). The character repertoire identified does not apply to objects and/or encrypted data.

The default encoding technique for a particular repertoire shall be the encoding technique defined by its associated character set specification.

If the default option is not used, a code value for the data element 0133 'Character encoding, coded' in the interchange header shall be used.

Code extension technique (ISO/IEC 2022) may only be used in an interchange after the composite data element S001 'Syntax identifier' in the interchange header.

The code extension technique and its target graphic characters shall only be used for:

   -   plain language (textual) data elements, with a representation of alphabetic or alphanumeric.

The technique shall not be used, for example, for any:

   -   segment tag, or
   -   service character, or
   -   data element with a representation of numeric.

Characters used to indicate code extension shall not be counted in the length of a data element, and shall not be used as service characters.

In calculating data element length, one graphic character shall be counted as one character, irrespective of the number of bytes/octets required to encode it.

7 Syntax structures

The definitions in this clause specify logical syntax structures. Rules to be applied for their usage are defined in clause 8.

7.1 Interchange structure

An interchange shall be started either by a service string advice or by an interchange header, shall be identified by an interchange header, shall be terminated by an interchange trailer, and shall contain at least one group, or one message or one package. There may be more than one group or message and/or package within an interchange, each identified by its own header and terminated by its own trailer. Messages within an interchange or within a group may comprise one or more message types.

An interchange shall contain only:
- Messages, or
- Packages, or
- Messages and Packages, or
- Groups containing messages, or
- Groups containing packages, or
- Groups containing messages and packages.

7.2 Group structure

A group is a conditional structure which is located between the interchange header and trailer and which comprises one or more messages and/or packages.

A group shall be started and identified by a group header, shall be terminated by a group trailer, and shall contain at least one message or package.

7.3 Message structure

A message comprises an ordered set of segments (see annex E). Segments may be grouped. Each segment's position, status, and maximum number of occurrences shall be stated in the message specification.

A given segment within a message specification shall have a status of mandatory or conditional.

A message specification shall ensure unambiguous identification of each message segment upon receipt. Identification shall be possible on the basis of the segment tag (or the segment tag plus the anti-collision segment group identification in the UGH and UGT segments) and the segment's position in the transferred message. Identification shall not depend on a segment's status or maximum number of occurrences.

A message shall be started and identified by a message header, shall be terminated by a message trailer, and shall contain at least one additional segment.

7.4 Segment group structure

A segment group comprises an ordered set of segments: a trigger segment and at least one more segment or segment group. The trigger segment shall be the first segment in the segment group, shall have a status of mandatory and a maximum number of occurrences of one. Each segment group's position, status, and maximum number of occurrences within the message structure shall be stated in the message specification.

A segment group may contain one or more dependent segment groups. When a segment group is contained within and directly subordinate to another segment group, the subordinate segment group is referred to as the child, and the other segment group is referred to as the parent.

A given segment group within a message specification shall have a status of mandatory or conditional.

7.5 Segment structure

A segment comprises an ordered set of stand-alone data elements and/or composite data elements, each of which are permitted to repeat, if so stated in the segment specification. Each stand-alone or composite data element's position, status and maximum number of occurrences within the segment structure shall be stated in the segment specification. A segment shall be started and identified by a segment tag which references a specific segment specification. A segment shall contain at least one data element in addition to the segment tag.

A given data element within a segment specification shall have a status of mandatory or conditional.

7.6 Segment tag structure

A segment tag is a simple data element.

Segment tags starting with the letter "U" (e.g. UNB, UIH) shall be reserved for service segments.

7.7 Composite data element structure

A composite data element comprises an ordered set of two or more component data elements. Each component data element's position and status within the composite data element structure shall be stated in the composite data element specification.

A given component data element within a composite data element specification shall have a status of mandatory or conditional.

7.8 Simple data element structure

A simple data element contains a single data element value.

A simple data element is used either as a stand-alone data element or as a component data element. A stand-alone data element occurs in a segment outside a composite data element. A component data element occurs within a composite data element.

Each simple data element's data value representation shall be stated in the data element specification.

7.9 Package structure

A package shall be started and identified by an object header, shall be terminated by an object trailer, and shall contain one object.

8 Inclusion and exclusion

The rules in this clause shall be applied when a message is prepared for transfer. Under these rules, in certain circumstances, segment groups, segments, data elements, and characters within a data element value, shall be present, while in other circumstances shall be omitted.

8.1 Determination of presence

A simple data element is considered present if its data element value contains at least one character.

A composite data element is considered present if at least one of its component data elements is present.

A segment is considered present if its segment tag is present.

A segment group is considered present if its trigger segment is present.

8.2 Inclusion of segment groups

A mandatory segment group which is not contained within another segment group shall be present.

A mandatory child segment group shall be present if its parent segment group is present.

A single occurrence of a segment group having a status of mandatory is sufficient to satisfy the mandatory requirement.

8.3 Exclusion of segment groups

If a segment group is omitted, all of its segments and any dependent segment groups contained within it, regardless of their status, shall also be omitted.

8.4 Inclusion of segments

Segments shall appear in the order stated in the message specification.

A segment shall be terminated by a segment terminator.

A mandatory segment which is not in a segment group shall be present.

A mandatory segment contained in a segment group shall be present if the segment group is present.

A single occurrence of a segment having a status of mandatory is sufficient to satisfy the mandatory requirement.

Using a fictitious segment tag of ABC as an example, a mandatory segment defined as containing only conditional data elements for which no data is present at the time of transfer, shall be transferred in the form ABC'.

8.5 Exclusion of segments

A conditional segment for which only the segment tag is present shall be omitted in its entirety.

8.6 Inclusion of data elements

Data elements shall appear in the order stated in the segment specification.

Adjacent non-repeating data elements in the same segment shall be separated by a data element separator.

Adjacent occurrences of the same repeating data element in a segment shall be separated by a repetition separator.

Adjacent component data elements in the same composite data element shall be separated by a component data element separator.

A mandatory stand-alone data element in a segment shall be present if the segment is present.

A mandatory composite data element in a segment shall be present if the segment is present.

A mandatory component data element in a composite data element shall be present if the composite data element is present.

A single occurrence of a repeating data element having a status of mandatory is sufficient to satisfy the mandatory requirement.

8.7 Exclusion of data elements

In the figures in the following sub-clauses, "Tag" represents a segment tag, "DE" represents a composite data element or stand-alone data element, and "CE" represents a component data element. The default service characters are used.

8.7.1 Exclusion of composite data elements and stand-alone data elements

If a non-repeating composite data element or stand-alone data element is omitted and is followed by a another composite data element or stand-alone data element in the same segment, its position shall be indicated by retention of the data element separator which would normally follow it. This rule also applies if all occurrences of a repeating data element are omitted.

```
Tag+DE+DE+++DE+DE+DE'
            └┘──────────────────── Two data elements have been omitted.
```
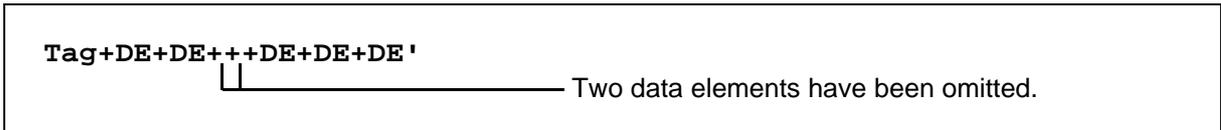
Figure 1 - Exclusion of non-repeating data elements within a segment

If one or more non-repeating composite data elements or stand-alone data elements at the end of a segment are omitted, the data element separators which would normally follow them shall also be omitted.

```
Tag+DE+DE+++DE'
           └───────────── Using the example structure in figure 1, the last
                          two data elements have been omitted.
```
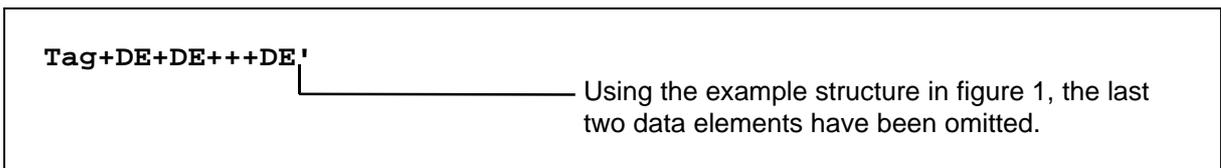
Figure 2 - Exclusion of non-repeating data elements at the end of a segment

8.7.2 Exclusion of component data elements

If a component data element is omitted and is followed by another component data element in the same composite data element, its position shall be indicated by retention of the component data element separator which would normally follow it.

```
Tag+DE+:CE:CE+CE::::CE'
       │          └┘──────── Two component data elements have been omitted.
       │
       └───────────────────── One component data element has been omitted.
```
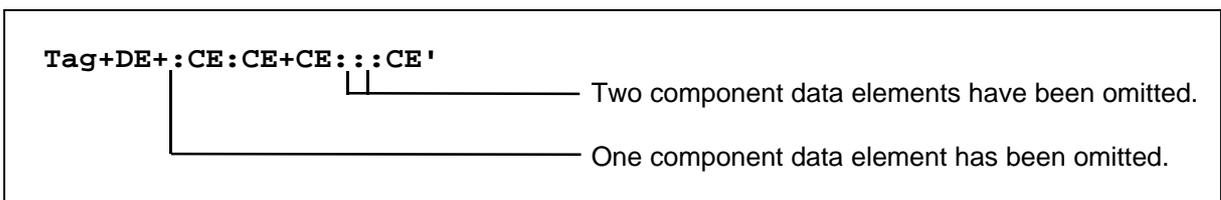
Figure 3 - Exclusion of component data elements within a composite data element

If one or more component data elements at the end of a composite data element are omitted, the component data element separators which would normally follow them shall also be omitted.

```
Tag+DE+:CE+CE'
```
Using the example structure in figure 3, the last component data element in the first composite data element and the last component data element in the last composite data element have been omitted.
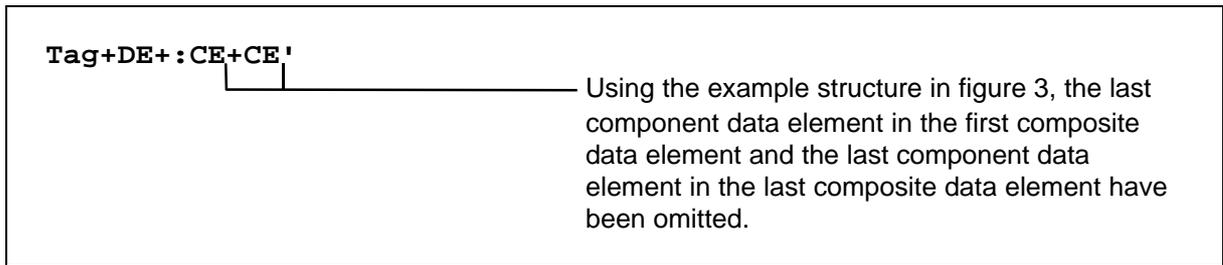
Figure 4 - Exclusion of component data elements at the end of a composite data element

8.7.3 Exclusion of occurrences of repeating data elements

The position of an occurrence of a repeating data element may be significant, for example, to transfer array data.

In such a case, if an occurrence of a repeating data element is omitted and is followed by another occurrence of the same repeating data element, its position shall be indicated by retention of the repetition separator which would normally follow it.

```
Tag+DE+DE*DE***DE+DE*DE'
```
Two occurrences of a repeating data element have been omitted.
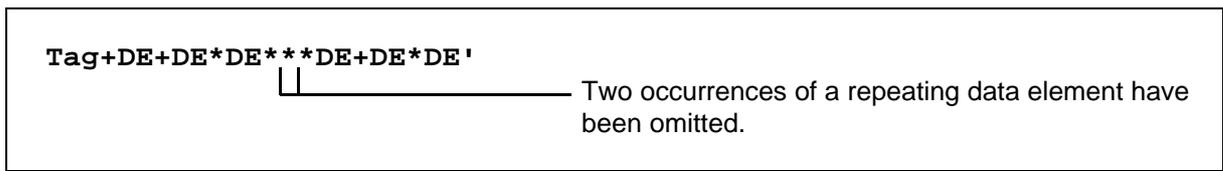
Figure 5 - Exclusion of occurrences within a repeating data element

If one or more occurrences of a repeating data element at the end of a repeating data element are omitted, the repetition separators which would normally follow them shall also be omitted.

```
Tag+DE+DE*DE+DE'
```
Using the example structure in figure 5, the last occurrence in the first repeating data element, and the last occurrence in the last repeating data element have been omitted.
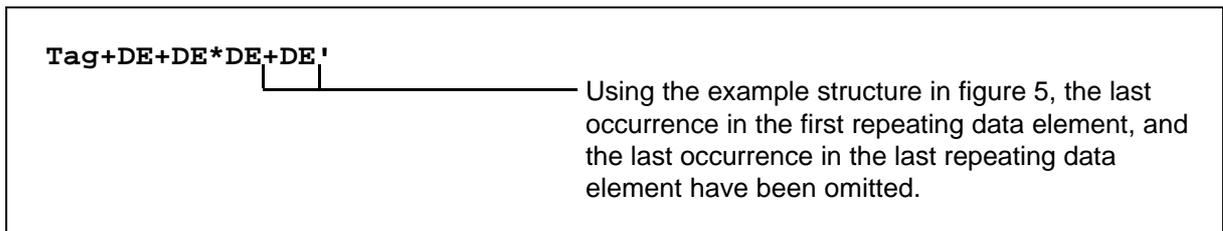
Figure 6 - Exclusion of occurrences at the end of a repeating data element

9   Suppression of characters within data elements

In variable length data elements, insignificant characters shall be suppressed (i.e. omitted from the transfer), while significant characters shall be present.

9.1   Insignificant characters

In variable length numeric data elements, leading zeroes shall be suppressed. Nevertheless, a single zero before a decimal mark is allowed. In variable length alphabetic and alphanumeric data elements, trailing spaces shall be suppressed.

9.2 Significant zeroes

Significant zeroes shall not be suppressed. A single zero may be significant, for example, to indicate a temperature or tax rate. Trailing zeroes following the decimal mark may be significant to indicate precision.

9.3 Significant spaces

Significant spaces shall not be suppressed. Leading and embedded spaces may be significant.
A data element value containing only space(s) shall not be allowed.

10 Representation of numeric data element values

For the purposes of this standard, the representation of numeric data element values shall be any of the representations as specified by ISO 6093 (which excludes the use of triad separators), with the following exceptions:

- The encoding specified in ISO/IEC 646 shall not be required.

- For variable length numeric fields, the rules for suppression apply (see clause 9).

- The space character and plus sign shall not be allowed.

- The length of a numeric data element value shall not include the minus sign (-), the decimal mark (. or ,), or the exponent mark (E or e) and its exponent.

- When a decimal mark is transferred, there shall be at least one digit after the decimal mark.

The full stop or the comma is allowed to represent the decimal mark for a single numerical value.

Examples using decimal marks:

Allowed (full stop):	2 and 2.00 and 0.5 and .5
Not allowed (full stop):	1. and 0. and .
Allowed (comma):	2 and 2,00 and 0,5 and ,5
Not allowed (comma):	1, and 0, and ,

11 Dependency notes

11.1 General

If required, dependency notes shall be used in the message, segment specification, or composite data element to express relationships.

In a dependency note, a list is defined as two or more entities (where an entity can be a segment group; a segment; a composite data element; a stand-alone data element or a component data element).

Any entity may be subject to more than one dependency note.

11.2 Dependency notes in the message specification

Dependency notes in the message specification are used to describe the relationship between segments, between segment groups, or between segments and segment groups. These entities shall be at the same hierarchical level and within the same parent structure.

11.3 Dependency notes in the segment specification

Dependency notes in the segment specification are used to describe the relationship between stand-alone data elements, between stand-alone data elements and composite data elements, or between composite data elements. These entities shall be in the same segment.

Dependency notes shall not be used to describe a relationship between stand-alone data elements and component data elements, or to describe a relationship between composite data elements and component data elements.

11.4 Dependency notes in the composite data element specification

Dependency notes in the composite data element specification are used to describe the relationship between component data elements. These entities shall be in the same composite data element.

11.5 Notation for dependency notes

The notation for dependency notes comprise a dependency identifier followed by a list, in parenthesis, of position identifiers separated by commas e.g. D3(030, 060, 090). The position identifier identifies an entity by its position number in its parent entity. The dependency identifier identifies the type of dependency between the entities in the list.

A list shall contain at least two position identifiers. The order of position identifiers in a list may be different from that implied by their value.

Dependency identifiers are described below.

D1 ONE AND ONLY ONE
One and only one of the entities in the list shall be present.

D2 ALL OR NONE
If one entity in the list is present, the rest shall be present.

D3 ONE OR MORE
At least one of the entities in the list shall be present.

D4 ONE OR NONE
No more than one entity in the list shall be present.

D5 IF FIRST, THEN ALL
If the first entity in the list is present, then all of the others shall be present. It is permissible that one or more of the entities not specified as the first entity in the list may be present, without requiring the first entity to be present.

D6 IF FIRST, THEN AT LEAST ONE MORE
If the first entity in the list is present, then at least one more shall be present. It is permissible that one or more of the entities not specified as the first entity in the list may be present, without requiring the first entity to be present.

D7 IF FIRST, THEN NONE OF THE OTHERS
If the first entity in the list is present, then none of the others shall be present.

12 Segment collision prevention

The UGH/UGT segment group shall be used in a message specification when it is not otherwise possible to ensure unambiguous identification of each message segment upon receipt through the basis of the segment tag and the segment's position in the transferred message (see annex F).

In this event, the UGH/UGT segment group shall be specified to surround the segment group which otherwise could not be unambiguously identified.

In the UGH/UGT segment group, the UGH segment shall be the first segment, shall be mandatory and shall be specified with a maximum number of occurrences of one. The UGT segment shall be the last segment in the segment group, shall be mandatory and shall be specified with a maximum number of occurrences of one.

The value of data element 0087 'Anti-collision segment group identification' shall be the segment group number of the UGH/UGT segment group as stated in the message specification.

The UGH/UGT segment group shall have a maximum number of occurrences of one and shall be specified with a status of conditional or mandatory, identical to the status of the segment group it surrounds.

Annex A
(normative)

Definitions

NOTES:

1. When a word or phrase appears in italics within a definition, this means that a definition exists in this annex for this word or phrase.

2. The terms are classified alphabetically; an identifier is added at the end of each definition, in square brackets, to facilitate the comparison between different linguistic versions. For example the English term "Alphabetic character set" is called in French "Jeu de caracteres alphabetique", and will not appear at the same alphabetic place in the two versions of the syntax; the identifier in brackets shall nevertheless remain "[1]".

3. Where ISO standards are referenced, the definitions have been taken from the referenced standard.

A.1   **alphabetic character set:** A *character* set that contains letters and/or *ideograms*, and may contain other *graphic characters* except digits. [1]

A.2   **alphanumeric character set:** A *character* set that contains letters, digits and/or *ideograms*, and may contain other *graphic characters*. [2]

A.3   **attribute:** A characteristic of an entity. [3]

A.4   **batch EDI:** *electronic data interchange* in which no strong requirements exist for formalised data exchange using query and response between the parties. [4]

A.5   **business:** A series of processes, each having a clearly understood purpose, involving more than one *organisation*, realised through the exchange of information and directed towards some mutually agreed upon goal, extending over a period of time. [5]

A.6   **character:** A member of a set of elements used for the organisation, control, or representation of *data.* (ISO/IEC 10646-1) [6]

A.7   **character repertoire:** The set of *graphic characters* of a *coded character set*, considered independently of its encoding. [7]

A.8   **code extension:** The techniques for the *encoding* of *characters* that are not included in the *character repertoire* of a given *coded character set.* [8]

A.9   **code list:** The complete set of *data element values* of a coded *simple data element.* [9]

A.10   **code list directory:** A listing of identified and specified *code lists.* [10]

A.11   **coded character set:** A set of unambiguous rules that establishes a *character* set and the one-to-one relationship between the *characters* of the set and their bit combinations. (ISO/IEC 6429) [11]

A.12   **component data element:** A *simple data element* used within a *composite data element.* [12]

A.13   **component data element separator:** A *service character* used to separate the *component data elements* within a *composite data element.* [13]

A.14   **composite data element:** An identified, named and structured set of functionally related *component data elements*, as described in a *composite data element specification.* In *transfer*, a composite data element is a specific ordered set of one or more *component data element(s)* in conformance with a *composite data element specification.* [14]

A.15 **composite data element directory:** A listing of identified and named *composite data elements* with their *composite data element specification.* [15]

A.16 **composite data element specification:** The description of a *composite data element* in a *composite data element directory*, including the specification of the position and *status* of the *component data elements* constituting the *composite data element.* [16]

A.17 **conditional:** A type of *status*, used in a *message specification*, *segment specification*, or *composite data element specification*, to specify that a *segment group, segment, composite data element, stand-alone data element* or *component data element* is used optionally or when the appropriate conditions occur. [17]

A.18 **control character:** A *character* whose occurrence in a particular context specifies a control function. (ISO 2382-4) [18]

A.19 **data:** A reinterpretable representation of information in a formalised manner suitable for communication, interpretation or processing. (ISO/IEC 2382-1) [19]

A.20 **data element:** A unit of *data* described in a *data element specification.* There are two classes of data element: *simple data elements* and *composite data elements.* [20]

A.21 **data element directory:** A listing of identified, named and specified *simple data elements* (*simple data element directory*) or *composite data elements* (*composite data element directory*). [21]

A.22 **data element separator:** A *service character* used to separate from each:
- a non *repeating stand-alone data elements*; or
- a *composite data elements* in a *segment; or*
- a set of occurrences of a *repeating data element*; or
- a null set of occurrences of a *repeating data element,*
where a set of occurrences of a *repeating data element* is a *repeating data element* having one or more of its occurrences (up to a maximum specified number) present in a *transfer*; and
where a null set of occurrences of a *repeating data element* is a *repeating data element* for which none of its specified occurrences are present in a *transfer.* [22]

A.23 **data element specification:** The specification of a *composite data element* in a *composite data element directory* (*composite data element specification*), or of a *simple data element* in a *simple data element directory* (*simple data element specification*). [23]

A.24 **data element value:** A specific instance of a *simple data element*, represented as specified in a *simple data element specification* and, if the *simple data element* is coded, in a *code list.* [24]

A.25 **data value representation:** The types of *characters* allowed (e.g. alphabetic, numeric) and conditions of length relating to the *data element values* of a *simple data element.* [25]

A.26 **decimal mark:** The *character* that separates the digits forming the integral part of a number from those forming the fractional part. (ISO 6093) [26]

A.27 **default service characters:** The set of *characters* used as *service characters* in circumstances where a different set is not defined in the *service string advice.* [27]

A.28 **dependency identifier:** An *identifier* used in a *dependency note* to specify the type of dependency between the entities listed in the *dependency note.* [28]

A.29 **dependency note:** A note used: i. in a *message specification* to express relationships between *segment groups* or between *segments*; ii. in a *segment specification* to express relationships between *data elements*; iii. in a *composite data element specification* to express relationships between *component data elements.* [29]

A.30 **dialogue:** A two-way conversation between an *initiator* and *responder* within an *I-EDI transaction.* It is formally composed of a pair of interchanges. [30]

A.31 **EDI (Electronic Data Interchange):** The electronic transfer from computer application to computer application of commercial or administrative transactions using an agreed standard to structure the transaction or message data. [31]

A.32 **encoding**: The representation of a *character* as a bit combination. [32]

A.33 **exponent mark:** A *control character* used to indicate that the *character(s)* that follow it are to be interpreted as an exponent. E or e is the exponent mark. [33]

A.34 **graphic character:** A *character*, other than a *control character*, that has a visual representation and is normally produced by writing, printing or displaying. (ISO 2382-4) [34]

A.35 **group:** A group of *messages* (of one or more *message types)* and/or *packages* (each containing an *object*), headed by a *group header* and ending with a *group trailer.* [35]

A.36 **group header:** The *service segment* heading and identifying a *group.* [36]

A.37 **group trailer:** The *service segment* ending a *group.* [37]

A.38 **I-EDI (Interactive EDI):** The exchange of pre-defined and structured data within a *dialogue*, which conforms to the syntax of Parts 1 and 3 of ISO 9735 for some *business* purpose, between a pair of co-operating processes, in a timely manner. [38]

A.39 **I-EDI transaction:** An instance of a *scenario.* It consists of one or more *dialogues.* [39]

A.40 **identifier:** A *character* or group of *characters* used to identify or name an item of *data* and possibly to indicate certain properties of that *data.* [40]

A.41 **ideogram:** In a natural language, a *graphic character* that represents a concept and associated sound elements. Example; A Chinese ideogram or a Japanese Kanji. [41]

A.42 **initiator:** The application which starts the *dialogue* and/or *I-EDI transaction.* [42]

A.43 **interchange:** A sequence of *messages* and/or *packages*, of the same or of different types, starting with the *interchange header* (or with the *service string advice* if used), and ending with the *interchange trailer.* [43]

A.44 **interchange header:** The *service segment* starting and uniquely identifying an *interchange.* [44]

A.45 **interchange trailer:** The *service segment* ending an *interchange.* [45]

A.46 **mandatory:** A type of *status*, used in a *message specification*, *segment specification*, or *composite data element specification*, to specify that a *segment group, segment*, *composite data element*, *stand-alone data element* or *component data element* shall be used at least one time. [46]

A.47 **message:** An identified, named and structured set of functionally related *segments*, covering the requirements for a specific type of transaction (e.g. invoice), as described in a *message specification*; a message starts with a *message header* and ends with a *message trailer.* In *transfer*, a message is a specific ordered set of *segments* in conformance with a *message specification.* [47]

A.48 **message body:** An identified, named and structured set of functionally related *segments*, covering the requirements for a specific type of transaction (e.g. invoice), as described in a *message specification,* excluding the *message header* and the *message trailer.* [48]

A.49 **message directory:** A listing of identified and named *messages* each with its *message specification.* [49]

A.50 **message header:** The *service segment* starting and uniquely identifying a *message.* [50]

A.51 **message specification:** The description of a *message* in a *message directory*, including the specification of the position, *status* and maximum number of occurrences of the *segments* and *segment groups* constituting the *message.* [51]

A.52 **message trailer:** The *service segment* ending a *message.* [52]

A.53 **message type:** Code identifying a type of *message* . [53]

A.54 **numeric character set:** A character set that contains digits and may contain *control characters* and *special characters* but not letters. (ISO 2382-4) [54]

A.55 **object:** A stream of bits grouped in octets (which may be associated with an EDIFACT *message*). [55]

A.56 **object header:** The *service segment* starting and uniquely identifying an *object*. [56]

A.57 **object trailer:** The *service segment* ending an *object*. [57]

A.58 **organisation:** A unique framework of authority within which a person or persons act, or are designated to act, towards some purpose. (ISO 6523) [58]

A.59 **package:** An *object* plus its associated header and trailer segments. [59]

A.60 **parent-child relationship:** A relationship between two entities, one ("child") being contained within and directly subordinated to the other ("parent"). [60]

A.61 **position identifier:** An *identifier* used in a *dependency note* to identify an entity (*segment group*, *segment*, or *data element*) by its position in the parent entity. [61]

A.62 **qualifier:** A *simple data element* whose *data element value*, extracted from a *code list*, gives specific meaning to the function of another *data element* or a *segment.* [62]

A.63 **release character:** A *character* indicating that the *character* immediately following it shall be passed to the application as received. [63]

A.64 **repeating data element:** A *composite data element* or *stand-alone data element* having a maximum occurrence of greater than one in the *segment specification.* [64]

A.65 **repetition separator:** A *service character* used to separate adjacent occurrences of a *repeating data element.* [65]

A.66 **responder:** An application replying to an *initiator.* [66]

A.67 **scenario:** A formal specification of a class of *business* activities having the same *business* goal. [67]

A.68 **segment:** An identified, named and structured set of functionally related *composite data elements* and/or *stand-alone data elements*, as described in a *segment specification*; a segment starts with the *segment tag* and ends with the *segment terminator*. In *transfer*, a segment is a specific ordered set of one or more *composite data element(s)* and/or *stand-alone data element(s)* in conformance with a *segment specification* and the syntax rules for *transfer.* [68]

A.69 **segment directory:** A listing of identified and named *segments* with their *segment specification.* [69]

A.70 **segment group:** An identified hierarchical set of *segments* and/or *segment groups* within a *message.* [70]

A.71 **segment specification:** The description of a *segment* in a *segment directory*, including the specification of the position, *status* and maximum number of occurrences of the *data elements* constituting the *segment.* [71]

A.72 **segment tag:** A *simple data element* uniquely identifying a *segment*, by reference to a *segment directory.* [72]

A.73 **segment terminator:** A *service character* indicating the end of a *segment.* [73]

A.74 **service character:** A *character* reserved for syntactical use; the service characters are the *component data element separator*, the *data element separator*, the *release character*, the *repetition separator* and the *segment terminator.* [74]

A.75 **service composite data element:** A *composite data element* used in *service segments*. A service *composite data element specification* contains only *service simple data elements.* [75]

A.76 **service data element:** A *service simple data element* or a *service composite data element.* [76]

A.77 **service message:** A *message* used to exchange service information relating to the use of EDIFACT syntax rules or security. A service *message specification* contains only *service segments.* [77]

A.78 **service segment:** A *segment* used i. in *service messages*; ii. to control the *transfer* of *data.* A service *segment specification* contains only *service composite data elements* and/or *service simple data elements.* [78]

A.79 **service simple data element:** A *simple data element* used only in *service segments* and/or *service composite data elements.* [79]

A.80 **service string advice:** An optional string of *characters* used at the beginning of an *interchange* to specify the *service characters* used in the *interchange.* [80]

A.81 **simple data element:** A *data element* containing a single *data element value.* There are two uses of a simple data element: within a *composite data element* (*component data element*); and within a *segment* outside a *composite data element* (*stand-alone data element).* [81]

A.82 **simple data element directory:** A listing of identified and named *simple data elements* with their simple *data element specification.* [82]

A.83 **simple data element specification:** The set of attributes characterising a *simple data element* in a *simple data element directory.* [83]

A.84 **special character:** A *graphic character* that is not a letter, digit, or blank *character*, and usually not an ideogram. (ISO 2382-4) [84]

A.85 **stand-alone data element:** A *simple data element* used within a *segment* without being in a *composite data element.* [85]

A.86 **status:** An *attribute* of a *segment*, a *composite data element* or a *simple data element* identifying the rules for the presence or absence of the *segment/data element* in the usage of a *message.* The types of status are *conditional* and *mandatory.* [86]

A.87 **string:** A sequence of elements of the same nature, such as *characters*, considered as a whole. (ISO 2382-4) [87]

A.88 **transfer:** The communication of information from one partner to another. [88]

A.89 **trigger segment:** The *segment* starting a *segment group.* [89]

Annex B
(normative)

UNA service string advice

The service string advice shall begin with the upper case characters UNA immediately followed by six characters in the order shown below. The space character shall not be used in positions 010, 020, 040, 050 or 060. The same character shall not be used in more than one position of the UNA.

POS	REP	S	Name	Remarks
010	an1	M	COMPONENT DATA ELEMENT SEPARATOR	
020	an1	M	DATA ELEMENT SEPARATOR	
030	an1	M	DECIMAL MARK	The character transferred in this position shall be ignored by the recipient. Retained to maintain upward compatibility with earlier versions of the syntax.
040	an1	M	RELEASE CHARACTER	
050	an1	M	REPETITION SEPARATOR	
060	an1	M	SEGMENT TERMINATOR	

Legend:

POS   The 3 numeric sequential number of the character in the service string

REP   The representation of the service string character
        an1 = 1 alphanumeric character

S   The status of the service string character
        M   = Mandatory

Name   Name of the service string advice character

Remarks   Additional remarks

Annex C
(normative)

Service directories
(service segments, service composite data elements
and service simple data elements)

C.1   Service segment directory

C.1.1 Service segment specification legend:

Function   The function of the segment

POS   The sequential position number of the stand-alone data element or composite data element in
             the segment table

TAG   The tags for all service segments contained in the segment directory shall start with the letter
             "U". The tags of all service composite data elements start with the letter "S", and the tags of all
             service simple data elements start with the figure "0"

Name   Name of a COMPOSITE DATA ELEMENT in capital letters
             Name of a STAND-ALONE DATA ELEMENT in capital letters
             Name of a component data element in small letters

S   The status of the stand-alone data element or composite data element in the segment, or of the
             components in the composite (where M = Mandatory and C = Conditional)

R   The maximum number of occurrences of a stand-alone data element or composite data
             element in the segment

Repr.   Data value representation of the stand-alone data element or component data elements in the
             composite:

             a   alphabetic characters
             n   numeric characters
             an   alphanumeric characters
             a3   3 alphabetic characters, fixed length
             n3   3 numeric characters, fixed length
             an3   3 alphanumeric characters, fixed length
             a..3   up to 3 alphabetic characters
             n..3   up to 3 numeric characters
             an..3   up to 3 alphanumeric characters

C.1.2 Dependency note identifiers

Code	Name
D1	One and only one
D2	All or none
D3	One or more
D4	One or none
D5	If first, then all
D6	If first, then at least one more
D7	If first, then none of the others

See clause 11.5 for the definition of the dependency note identifiers

C.1.3 Index of service segments by tag

TAG	Name
UGH	Anti-collision segment group header
UGT	Anti-collision segment group trailer
UIB	Interactive interchange header
UIH	Interactive message header
UIR	Interactive status
UIT	Interactive message trailer
UIZ	Interactive interchange trailer
UNB	Interchange header
UNE	Group trailer
UNG	Group header
UNH	Message header
UNO	Object header
UNP	Object trailer
UNS	Section control
UNT	Message trailer
UNZ	Interchange trailer

C.1.4 Index of service segments by name

TAG	Name
UGH	Anti-collision segment group header
UGT	Anti-collision segment group trailer
UNG	Group header
UNE	Group trailer
UIB	Interactive interchange header
UIZ	Interactive interchange trailer
UIH	Interactive message header
UIT	Interactive message trailer
UIR	Interactive status

UNB	Interchange header
UNZ	Interchange trailer
UNH	Message header
UNT	Message trailer
UNO	Object header
UNP	Object trailer
UNS	Section control

C.1.5 Service segment specifications

      UGH   ANTI-COLLISION SEGMENT GROUP HEADER

      Function: To head, identify and specify an anti-collision segment group.

POS	TAG	Name	S	R	Repr.	Notes
010	0087	ANTI-COLLISION SEGMENT GROUP IDENTIFICATION	M	1	an..4	1

NOTES:

1. 0087, the value shall be the segment group number of the UGH/UGT segment
   group as stated in the message specification. It shall be identical to the
   value in 0087 in the corresponding UGT segment.

      UGT   ANTI-COLLISION SEGMENT GROUP TRAILER

      Function: To end and check the completeness of an anti-collision segment
             group.

POS	TAG	Name	S	R	Repr.	Notes
010	0087	ANTI-COLLISION SEGMENT GROUP IDENTIFICATION	M	1	an..4	1

NOTES:

1. 0087, the value shall be the segment group number of the UGH/UGT segment
   group as stated in the message specification. It shall be identical to the
   value in 0087 in the corresponding UGH segment.

      UIB   INTERACTIVE INTERCHANGE HEADER

      Function: To head and identify an interchange.

POS	TAG	Name	S	R	Repr.	Notes
010	S001	SYNTAX IDENTIFIER	M	1		3
	0001	Syntax identifier	M		a4	
	0002	Syntax version number	M		an1	
	0080	Service code list directory version number	C		an..6	
	0133	Character encoding, coded	C		an..3	
020	S302	DIALOGUE REFERENCE	C	1		1,2,4,5 8
	0300	Initiator control reference	M		an..35	
	0303	Initiator reference identification	C		an..35	
	0051	Controlling agency, coded	C		an..3	
	0304	Responder control reference	C		an..35	
030	S303	TRANSACTION REFERENCE	C	1		1,8
	0306	Transaction control reference	M		an..35	
	0303	Initiator reference identification	C		an..35	
	0051	Controlling agency, coded	C		an..3	

```
040   S018   SCENARIO IDENTIFICATION                      C 1
      0127   Scenario identification                      M     an..14
      0128   Scenario version number                      C     an..3
      0130   Scenario release number                      C     an..3
      0051   Controlling agency, coded                    C     an..3

050   S305   DIALOGUE IDENTIFICATION                      C 1               2
      0311   Dialogue identification                      M     an..14
      0342   Dialogue version number                      C     an..3
      0344   Dialogue release number                      C     an..3
      0051   Controlling agency, coded                    C     an..3

060   S002   INTERCHANGE SENDER                           C 1               5
      0004   Interchange sender identification            M     an..35
      0007   Identification code qualifier                C     an..4
      0008   Interchange sender internal identification C     an..35
      0042   Interchange sender internal
             sub-identification                           C     an..35

070   S003   INTERCHANGE RECIPIENT                         C 1
      0010   Interchange recipient identification         M     an..35
      0007   Identification code qualifier                C     an..4
      0014   Interchange recipient internal
             identification                               C     an..35
      0046   Interchange recipient internal
             sub-identification                           C     an..35

080   S300   DATE AND/OR TIME OF INITIATION               C 1
      0338   Event date                                   C     n..8
      0314   Event time                                   C     an..15
      0336   Time offset                                  C     n4

090   0325   DUPLICATE INDICATOR                          C 1   a1          6

100   0035   TEST INDICATOR                               C 1   n1          7
```

DEPENDENCY NOTES:

1. D5(030, 020) If first, then all

2. D5(050, 020) If first, then all

OTHER NOTES:

3. S001/0002, shall be '4' to indicate this version of the syntax.

4. S302/0304, when provided by the responder, shall be returned by the
    initiator throughout the dialogue.

5. S002/0004, may be same as S302/0303 for initiator of transaction.

6. 0325, only used if the interchange is a duplicate transfer.

7. 0035, set by the initiator if the dialogue is a test. Applies to every
    subsequent message and service segment in the dialogue. Otherwise not used.

8. Dialogue and transaction control can be accomplished through the dialogue
    (S302) and transaction (S303) references. Optionally, if another means of
    control is chosen, these two composite data elements need not be utilised.

     UIH   INTERACTIVE MESSAGE HEADER

     Function: To head, identify and specify a message.

POS	TAG	Name	S R	Repr.	Notes
010	S306	INTERACTIVE MESSAGE IDENTIFIER	M 1		
	0065	Message type	M	an..6	
	0052	Message version number	M	an..3	
	0054	Message release number	M	an..3	
	0113	Message type sub-function identification	C	an..6	
	0051	Controlling agency, coded	C	an..3	
	0057	Association assigned code	C	an..6	
020	0340	INTERACTIVE MESSAGE REFERENCE NUMBER	C 1	an..35	1,5
030	S302	DIALOGUE REFERENCE	C 1		2,4,5
	0300	Initiator control reference	M	an..35	
	0303	Initiator reference identification	C	an..35	
	0051	Controlling agency, coded	C	an..3	
	0304	Responder control reference	C	an..35	
040	S301	STATUS OF TRANSFER - INTERACTIVE	C 1		
	0320	Sender sequence number	C	n..6	
	0323	Transfer position, coded	C	a1	
	0325	Duplicate indicator	C	a1	
050	S300	DATE AND/OR TIME OF INITIATION	C 1		
	0338	Event date	C	n..8	
	0314	Event time	C	an..15	
	0336	Time offset	C	n4	
060	0035	TEST INDICATOR	C 1	n1	3

NOTES:

1. The value in 0340 shall be unique within the interchange (except for a
    duplicate transfer).

2. The value(s) in S302 shall be identical to the value(s) in S302 in the
    preceding UIB.

3. 0035, when used, test applies to the message only.

4. Dialogue control can be accomplished through the dialogue reference (S302).
    Optionally, if another means of control is chosen, this composite data
    element need not be utilised.

5. A combination of 0340 and S302 may be used to identify uniquely a message.

      UIR   INTERACTIVE STATUS

      Function: To report the status of the dialogue.

POS	TAG	Name	S R	Repr.	Notes
010	0331	REPORT FUNCTION, CODED	M 1	an..3	
020	S307	REPORT REASON	C 9		
	0333	Report reason, coded	C	an..3	
	0332	Report reason text	C	an..70	
	0335	Report language, coded	C	an..3	
030	S302	DIALOGUE REFERENCE	C 1		
	0300	Initiator control reference	M	an..35	
	0303	Initiator reference identification	C	an..35	
	0051	Controlling agency, coded	C	an..3	
	0304	Responder control reference	C	an..35	
040	S300	DATE AND/OR TIME OF INITIATION	C 1		
	0338	Event date	C	n..8	
	0314	Event time	C	an..15	
	0336	Time offset	C	n4	
050	0340	INTERACTIVE MESSAGE REFERENCE NUMBER	C 1	an..35	1,2
060	0800	PACKAGE REFERENCE NUMBER	C 1	an..35	1,3

DEPENDENCY NOTES:

1. D1(050, 060) One and only one

OTHER NOTES:

2. 0340, the value shall be identical to the value in 0340 in the UIH
    of a message received by the sender of the UIR within the same dialogue.

3. 0800, the value shall be identical to the value in 0800 in the UNO
    received by the sender of the UIR within the same dialogue.

      UIT   INTERACTIVE MESSAGE TRAILER

      Function: To end and check the completeness of a message.

POS	TAG	Name	S R	Repr.	Notes
010	0340	INTERACTIVE MESSAGE REFERENCE NUMBER	C 1	an..35	1
020	0074	NUMBER OF SEGMENTS IN A MESSAGE	C 1	n..10	

NOTES:

1. 0340, the value shall be identical to the value in 0340 in the
    corresponding UIH segment.

      UIZ   INTERACTIVE INTERCHANGE TRAILER

      Function: To end and check the completeness of an interchange.

POS	TAG	Name	S R	Repr.	Notes
010	S302	DIALOGUE REFERENCE	C 1		1
	0300	Initiator control reference	M	an..35	
	0303	Initiator reference identification	C	an..35	
	0051	Controlling Agency, coded	C	an..3	
	0304	Responder control reference	C	an..35	
020	0036	INTERCHANGE CONTROL COUNT	C 1	n..6	
030	0325	DUPLICATE INDICATOR	C 1	a1	2

NOTES:

1. S302, the value shall be identical to the value in the responder's
    dialogue reference in S302 in the UIB segment.

2. 0325, only used if the interchange is a duplicate transfer.

        UNB   INTERCHANGE HEADER

        Function: To identify an interchange.

POS	TAG	Name	S R	Repr.	Notes
010	S001	SYNTAX IDENTIFIER	M 1		1
	0001	Syntax identifier	M	a4	
	0002	Syntax version number	M	an1	
	0080	Service code list directory version number	C	an..6	
	0133	Character encoding, coded	C	an..3	
020	S002	INTERCHANGE SENDER	M 1		2
	0004	Interchange sender identification	M	an..35	
	0007	Identification code qualifier	C	an..4	
	0008	Interchange sender internal identification	C	an..35	
	0042	Interchange sender internal sub-identification	C	an..35	
030	S003	INTERCHANGE RECIPIENT	M 1		2
	0010	Interchange recipient identification	M	an..35	
	0007	Identification code qualifier	C	an..4	
	0014	Interchange recipient internal identification	C	an..35	
	0046	Interchange recipient internal sub-identification	C	an..35	
040	S004	DATE AND TIME OF PREPARATION	M 1		
	0017	Date	M	n8	
	0019	Time	M	n4	
050	0020	INTERCHANGE CONTROL REFERENCE	M 1	an..14	2
060	S005	RECIPIENT REFERENCE/PASSWORD DETAILS	C 1		
	0022	Recipient reference/password	M	an..14	
	0025	Recipient reference/password qualifier	C	an2	
070	0026	APPLICATION REFERENCE	C 1	an..14	
080	0029	PROCESSING PRIORITY CODE	C 1	a1	
090	0031	ACKNOWLEDGEMENT REQUEST	C 1	n1	
100	0032	INTERCHANGE AGREEMENT IDENTIFIER	C 1	an..35	
110	0035	TEST INDICATOR	C 1	n1	

NOTES:

1. S001/0002, shall be '4' to indicate this version of the syntax.

2. The combination of the values carried in data elements S002, S003 and 0020
    shall be used to identify uniquely the interchange, for the purpose of
    acknowledgement.

UNE   GROUP TRAILER

Function: To end and check the completeness of a group

POS	TAG	Name	S	R	Repr.	Notes
010	0060	GROUP CONTROL COUNT	M	1	n..6	
020	0048	GROUP REFERENCE NUMBER	M	1	an..14	1

NOTES:

1. 0048, the value shall be identical to the value in 0048 in the
    corresponding UNG segment.

UNG   GROUP HEADER

Function: To head, identify and specify a group of messages and/or
          packages, which may be used for internal routing and which may
          contain one or more message types and/or packages.

POS	TAG	Name	S	R	Repr.	Notes
010	0038	MESSAGE GROUP IDENTIFICATION	C	1	an..6	1,2,4
020	S006	APPLICATION SENDER IDENTIFICATION	C	1		5
	0040	Application sender identification	M		an..35	
	0007	Identification code qualifier	C		an..4	
030	S007	APPLICATION RECIPIENT IDENTIFICATION	C	1		5
	0044	Application recipient identification	M		an..35	
	0007	Identification code qualifier	C		an..4	
040	S004	DATE AND TIME OF PREPARATION	C	1		3
	0017	Date	M		n8	
	0019	Time	M		n4	
050	0048	GROUP REFERENCE NUMBER	M	1	an..14	5
060	0051	CONTROLLING AGENCY, CODED	C	1	an..3	1,2,4
070	S008	MESSAGE VERSION	C	1		1,2,4
	0052	Message version number	M		an..3	
	0054	Message release number	M		an..3	
	0057	Association assigned code	C		an..6	
080	0058	APPLICATION PASSWORD	C	1	an..14	

DEPENDENCY NOTES:

1. D2(010, 060, 070) All or none

OTHER NOTES:

2. This data element is only used if the following conditions apply:
    i) the group contains messages only, and
    ii) the messages are of a single message type.

3. S004, if S004 is not present in UNG, the date and time of preparation is
    the same as indicated for the interchange in S004 in UNB.
4. This data element will be deleted from the UNG segment in the next version
    of the standard. Therefore its use in UNG is not recommended.

5. The combination of the values carried in data elements S006, S007 and 0048
    shall be used to identify uniquely the group within its interchange, for
    the purpose of acknowledgement.

        UNH   MESSAGE HEADER

        Function: To head, identify and specify a message.

POS	TAG	Name	S R	Repr.	Notes
010	0062	MESSAGE REFERENCE NUMBER	M 1	an..14	2
020	S009	MESSAGE IDENTIFIER	M 1		1,2
	0065	Message type	M	an..6	
	0052	Message version number	M	an..3	
	0054	Message release number	M	an..3	
	0051	Controlling agency, coded	M	an..3	
	0057	Association assigned code	C	an..6	
	0110	Code list directory version number	C	an..6	
	0113	Message type sub-function identification	C	an..6	
030	0068	COMMON ACCESS REFERENCE	C 1	an..35	
040	S010	STATUS OF THE TRANSFER	C 1		
	0070	Sequence of transfers	M	n..2	
	0073	First and last transfer	C	a1	
050	S016	MESSAGE SUBSET IDENTIFICATION	C 1		1
	0115	Message subset identification	M	an..14	
	0116	Message subset version number	C	an..3	
	0118	Message subset release number	C	an..3	
	0051	Controlling agency, coded	C	an..3	
060	S017	MESSAGE IMPLEMENTATION GUIDELINE IDENTIFICATION	C 1		1
	0121	Message implementation guideline identification	M	an..14	
	0122	Message implementation guideline version number	C	an..3	
	0124	Message implementation guideline release number	C	an..3	
	0051	Controlling agency, coded	C	an..3	
070	S018	SCENARIO IDENTIFICATION	C 1		
	0127	Scenario identification	M	an..14	
	0128	Scenario version number	C	an..3	
	0130	Scenario release number	C	an..3	
	0051	Controlling agency, coded	C	an..3	

NOTES:

1. Data element S009/0057 is retained for upward compatibility. The use of S016
    and/or S017 is encouraged in preference.

2. The combination of the values carried in data elements 0062 and S009 shall
    be used to identify uniquely the message within its group (if used) or if

not used, within its interchange, for the purpose of acknowledgement.

UNO   OBJECT HEADER

Function: To head, identify and specify an object.

POS	TAG	Name	S R	Repr.	Notes
010	0800	PACKAGE REFERENCE NUMBER	M 1	an..35	1
020	S020	REFERENCE IDENTIFICATION	M 99		2
	0813	Reference qualifier	M	an..3	
	0802	Reference identification number	M	an..35	
030	S021	OBJECT TYPE IDENTIFICATION	M 99		3
	0805	Object type qualifier	M	an..3	
	0809	Object type attribute identification	C	an..256	
	0808	Object type attribute	C	an..256	
	0051	Controlling agency, coded	C	an..3	
040	S022	STATUS OF THE OBJECT	M 1		
	0810	Length of object in octets of bits	M	n..18	
	0814	Number of segments before object	C	n..3	
	0070	Sequence of transfers	C	n..2	
	0073	First and last transfer	C	a1	
050	S302	DIALOGUE REFERENCE	C 1		4
	0300	Initiator control reference	M	an..35	
	0303	Initiator reference identification	C	an..35	
	0051	Controlling agency, coded	C	an..3	
	0304	Responder control reference	C	an..35	
060	S301	STATUS OF TRANSFER - INTERACTIVE	C 1		4
	0320	Sender sequence number	C	n..6	
	0323	Transfer position, coded	C	a1	
	0325	Duplicate indicator	C	a1	
070	S300	DATE AND/OR TIME OF INITIATION	C 1		4
	0338	Event date	C	n..8	
	0314	Event time	C	an..15	
	0336	Time offset	C	n4	
080	0035	TEST INDICATOR	C 1	n1	4

NOTES:

1. The value in 0800 shall be unique within the interchange (except for a
    duplicate transfer).

2. One mandatory occurrence of S020 shall identify the Object Identification
    Number.

3. One occurrence of S021 is mandatory and shall be used for file format
    identification.

4. Data elements S302, S301, S300 and 0035 are for interactive EDI use only:
    - The value(s) in S302 shall be identical to the value(s) in S302 in the
      preceding UIB.
    - 0035, when used, test applies to the package only.

UNP   OBJECT TRAILER

Function: To end and check the completeness of an object.

POS	TAG	Name	S	R	Repr.	Notes
010	0810	LENGTH OF OBJECT IN OCTETS OF BITS	M	1	n..18	1
020	0800	PACKAGE REFERENCE NUMBER	M	1	an..35	2

NOTES:

1. 0810, shall be identical to the value in data element 0810 in UNO.

2. 0800, shall be identical to the value in data element 0800 in UNO.

UNS   SECTION CONTROL

Function: To separate header, detail and summary sections of a message.

   Note: To be used by message designers only when required to avoid
         ambiguities.

POS	TAG	Name	S	R	Repr.	Notes
010	0081	SECTION IDENTIFICATION	M	1	a1	

UNT   MESSAGE TRAILER

Function: To end and check the completeness of a message.

POS	TAG	Name	S	R	Repr.	Notes
010	0074	NUMBER OF SEGMENTS IN A MESSAGE	M	1	n..10	
020	0062	MESSAGE REFERENCE NUMBER	M	1	an..14	1

NOTES:

1. 0062, the value shall be identical to the value in 0062 in the
    corresponding UNH segment.

     UNZ   INTERCHANGE TRAILER

     Function: To end and check the completeness of an interchange.

POS	TAG	Name	S R	Repr.	Notes
010	0036	INTERCHANGE CONTROL COUNT	M 1	n..6	
020	0020	INTERCHANGE CONTROL REFERENCE	M 1	an..14	1

NOTES:

1. 0020, the value shall be identical to the value in 0020 in the
    corresponding UNB segment.

C.2   Service composite data element directory

C.2.1 Service composite data element specification legend:

POS   The sequential position number of the component data element in the composite data element

TAG   The tags of all service composite data elements contained in the composite data element directory start with the letter "S", and the tags of all service simple data elements start with the figure "0"

Name   Name of a component data element in small letters

S   The status of the component data element in the composite data element
             (where M = Mandatory and C = Conditional)

Repr.   Data value representation of the component data elements in the composite:

             a   alphabetic characters
             n   numeric characters
             an   alphanumeric characters
             a3   3 alphabetic characters, fixed length
             n3   3 numeric characters, fixed length
             an3   3 alphanumeric characters, fixed length
             a..3   up to 3 alphabetic characters
             n..3   up to 3 numeric characters
             an..3   up to 3 alphanumeric characters

Desc.   Description of the composite data element

C.2.2 Dependency note identifiers

Code	Name
D1	One and only one
D2	All or none
D3	One or more
D4	One or none
D5	If first, then all
D6	If first, then at least one more
D7	If first, then none of the others

See clause 11.5 for the definition of the dependency note identifiers

C.2.3 Index of service composite data elements by tag

TAG	Name
S001	Syntax identifier
S002	Interchange sender
S003	Interchange recipient
S004	Date and time of preparation
S005	Recipient reference/password details
S006	Application sender identification

S007	Application recipient identification
S008	Message version
S009	Message identifier
S010	Status of the transfer
S016	Message subset identification
S017	Message implementation guideline identification
S018	Scenario identification
S020	Reference identification
S021	Object type identification
S022	Status of the object
S300	Date and/or time of initiation
S301	Status of transfer - interactive
S302	Dialogue reference
S303	Transaction reference
S305	Dialogue identification
S306	Interactive message identifier
S307	Report reason

C.2.4 Index of service composite data elements by name

TAG	Name
S007	Application recipient identification
S006	Application sender identification
S004	Date and time of preparation
S300	Date and/or time of initiation
S305	Dialogue identification
S302	Dialogue reference
S306	Interactive message identifier
S003	Interchange recipient
S002	Interchange sender
S009	Message identifier
S017	Message implementation guideline identification
S016	Message subset identification
S008	Message version
S021	Object type identification
S005	Recipient reference/password details
S020	Reference identification
S307	Report reason
S018	Scenario identification
S022	Status of the object
S010	Status of the transfer
S301	Status of transfer - interactive
S001	Syntax identifier
S303	Transaction reference

C.2.5 Service composite data element specifications

```
--------------------------------------------------------------------------------


      S001   SYNTAX IDENTIFIER

      Desc: Identification of the agency controlling the syntax, the syntax
            level and version number, and the service code directory.

POS    TAG    Name                                        S Repr.   Notes

010    0001   Syntax identifier                           M a4
020    0002   Syntax version number                       M an1
030    0080   Service code list directory version number  C an..6
040    0133   Character encoding, coded                   C an..3

--------------------------------------------------------------------------------


      S002   INTERCHANGE SENDER

      Desc: Identification of the sender of the interchange.

POS    TAG    Name                                        S Repr.   Notes

010    0004   Interchange sender identification           M an..35
020    0007   Identification code qualifier               C an..4
030    0008   Interchange sender internal identification  C an..35
040    0042   Interchange sender internal
              sub-identification                          C an..35

--------------------------------------------------------------------------------


      S003   INTERCHANGE RECIPIENT

      Desc: Identification of the recipient of the interchange.

POS    TAG    Name                                        S Repr.   Notes

010    0010   Interchange recipient identification        M an..35
020    0007   Identification code qualifier               C an..4
030    0014   Interchange recipient internal
              identification                              C an..35
040    0046   Interchange recipient internal
              sub-identification                          C an..35

--------------------------------------------------------------------------------


      S004   DATE AND TIME OF PREPARATION

      Desc: Date and time of preparation of the interchange.

POS    TAG    Name                                        S Repr.   Notes

010    0017   Date                                        M n8
020    0019   Time                                        M n4

--------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------------

     S005   RECIPIENT REFERENCE/PASSWORD DETAILS

     Desc: Reference or password as agreed between the communicating partners.

POS    TAG    Name                                          S Repr.   Notes

010    0022   Recipient reference/password                  M an..14
020    0025   Recipient reference/password qualifier        C an2

--------------------------------------------------------------------------------

     S006   APPLICATION SENDER IDENTIFICATION

     Desc: Sender identification of for example a division, branch or
           application computer system/process.

POS    TAG    Name                                          S Repr.   Notes

010    0040   Application sender identification             M an..35
020    0007   Identification code qualifier                 C an..4

--------------------------------------------------------------------------------

     S007   APPLICATION RECIPIENT IDENTIFICATION

     Desc: Recipient identification of for example a division, branch or
           application computer system/process.

POS    TAG    Name                                          S Repr.   Notes

010    0044   Application recipient identification          M an..35
020    0007   Identification code qualifier                 C an..4

--------------------------------------------------------------------------------

     S008   MESSAGE VERSION

     Desc: Specification of the version and release numbers of all of the
           messages of a single type in the group.

POS    TAG    Name                                          S Repr.   Notes

010    0052   Message version number                        M an..3
020    0054   Message release number                        M an..3
030    0057   Association assigned code                     C an..6

--------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------

      S009   MESSAGE IDENTIFIER

      Desc: Identification of the type, version, etc. of the message being
            interchanged.

POS    TAG    Name                                          S Repr.    Notes

010    0065   Message type                                  M an..6
020    0052   Message version number                        M an..3
030    0054   Message release number                        M an..3
040    0051   Controlling agency, coded                     M an..3
050    0057   Association assigned code                     C an..6
060    0110   Code list directory version number            C an..6
070    0113   Message type sub-function identification       C an..6

-------------------------------------------------------------------------------

      S010   STATUS OF THE TRANSFER

      Desc: Statement that the message is one in a sequence of transfers
            relating to the same topic.

POS    TAG    Name                                          S Repr.    Notes

010    0070   Sequence of transfers                         M n..2
020    0073   First and last transfer                       C a1

-------------------------------------------------------------------------------

      S016   MESSAGE SUBSET IDENTIFICATION

      Desc: Identification of a message subset by its identifier, version,
            release and source.

POS    TAG    Name                                          S Repr.    Notes

010    0115   Message subset identification                 M an..14
020    0116   Message subset version number                 C an..3
030    0118   Message subset release number                 C an..3
040    0051   Controlling agency, coded                     C an..3

-------------------------------------------------------------------------------

      S017   MESSAGE IMPLEMENTATION GUIDELINE IDENTIFICATION

      Desc: Identification of a message implementation guideline by its
            identifier, version, release and source.

POS    TAG    Name                                          S Repr.    Notes

010    0121   Message implementation guideline
              identification                                M an..14
020    0122   Message implementation guideline version
              number                                        C an..3
030    0124   Message implementation guideline release
              number                                        C an..3
040    0051   Controlling agency, coded                     C an..3

-------------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------

       S018   SCENARIO IDENTIFICATION

       Desc: Identification of a scenario.

POS    TAG    Name                                       S Repr.   Notes

010    0127   Scenario identification                    M an..14
020    0128   Scenario version number                    C an..3
030    0130   Scenario release number                    C an..3
040    0051   Controlling agency, coded                  C an..3

-------------------------------------------------------------------------------

       S020   REFERENCE IDENTIFICATION

       Desc: Identification of the reference relating to the object.

POS    TAG    Name                                       S Repr.   Notes

010    0813   Reference qualifier                        M an..3
020    0802   Reference identification number            M an..35

-------------------------------------------------------------------------------

       S021   OBJECT TYPE IDENTIFICATION

       Desc: Identification of the attribute related to the object type.

POS    TAG    Name                                       S Repr.   Notes

010    0805   Object type qualifier                      M an..3
020    0809   Object type attribute identification       C an..256 1
030    0808   Object type attribute                      C an..256 1
040    0051   Controlling agency, coded                  C an..3


DEPENDENCY NOTES:

1.  D3(020, 030) One or more

-------------------------------------------------------------------------------

       S022   STATUS OF THE OBJECT

       Desc: Identification of the length and if required the transfer status
             of the object.

POS    TAG    Name                                       S Repr.   Notes

010    0810   Length of object in octets of bits         M n..18
020    0814   Number of segments before object           C n..3
030    0070   Sequence of transfers                      C n..2
040    0073   First and last transfer                    C a1

-------------------------------------------------------------------------------
```

```
      S300   DATE AND/OR TIME OF INITIATION

      Desc: Date and/or time of event initiation.

POS    TAG    Name                                       S Repr.   Notes

010    0338   Event date                                 C n..8
020    0314   Event time                                 C an..15  1
030    0336   Time offset                                C n4      1
```

DEPENDENCY NOTES:

1. D5(030, 020) If first, then all

```
      S301   STATUS OF TRANSFER - INTERACTIVE

      Desc:  Identifies the sequence of the message/package within the
             sender's interchange and the position in a multi-message and/or
             package transfer.

POS    TAG    Name                                       S Repr.   Notes

010    0320   Sender sequence number                     C n..6    1
020    0323   Transfer position, coded                   C a1      2
030    0325   Duplicate indicator                        C a1      3
```

NOTES:

1. 0320, starts at 1 and is incremented by 1 for each message and package
    within an interchange.

2. 0323, only used where more than one message or package is contained in
    a single query or response.

3. 0325, only used if a duplicate transfer.

```
      S302   DIALOGUE REFERENCE

      Desc: Unique reference for the dialogue between co-operating parties
            within the interactive EDI transaction.

POS    TAG    Name                                       S Repr.   Notes

010    0300   Initiator control reference                M an..35
020    0303   Initiator reference identification         C an..35  1
030    0051   Controlling agency, coded                  C an..3   1
040    0304   Responder control reference                C an..35
```

DEPENDENCY NOTES:

1. D5(030, 020) If first, then all

```
-------------------------------------------------------------------------------

        S303    TRANSACTION REFERENCE

        Desc: Unique reference for the business transaction to which the
              dialogue belongs.

POS     TAG     Name                                        S Repr.   Notes

010     0306    Transaction control reference               M an..35
020     0303    Initiator reference identification          C an..35  1
030     0051    Controlling agency, coded                   C an..3   1


DEPENDENCY NOTES:

1.  D5(030, 020) If first, then all

-------------------------------------------------------------------------------

        S305    DIALOGUE IDENTIFICATION

        Desc: Identification of the dialogue type being used for the interactive
              EDI transaction.

POS     TAG     Name                                        S Repr.   Notes

010     0311    Dialogue identification                     M an..14
020     0342    Dialogue version number                     C an..3
030     0344    Dialogue release number                     C an..3
040     0051    Controlling agency, coded                   C an..3

-------------------------------------------------------------------------------

        S306    INTERACTIVE MESSAGE IDENTIFIER

        Desc: Identification of the type, version and details of the message
              being interchanged.

POS     TAG     Name                                        S Repr.   Notes

010     0065    Message type                                M an..6
020     0052    Message version number                      M an..3
030     0054    Message release number                      M an..3
040     0113    Message type sub-function identification     C an..6
050     0051    Controlling agency, coded                   C an..3
060     0057    Association assigned code                    C an..6

-------------------------------------------------------------------------------
```

```
--------------------------------------------------------------------------

      S307  REPORT REASON

      Desc: Reason for status or error report.

POS    TAG    Name                                     S Repr.   Notes

010    0333   Report reason, coded                     C an..3
020    0332   Report reason text                       C an..70  1,2
030    0335   Report language, coded                   C an..3   1


DEPENDENCY NOTES:

1.  D5(030, 020) If first, then all

OTHER NOTES:

2.  0332, defaults to English in the absence of a value in 0335.

--------------------------------------------------------------------------
```

C.3 Service simple data element directory

The service code directory forms part of the UN Trade Data Interchange Directory (UNTDID). The most recent UNTDID should be used to reference the code values for the coded data elements in the following simple data element directory.

C.3.1 Service simple data element specification legend:

Tag   The tags of all service simple data elements contained in the simple data element directory start with figure "0".

Name   Name of a simple data element

Desc.   Description of the simple data element

Repr.   Data value representation of the simple data element:

a	alphabetic characters
n	numeric characters
an	alphanumeric characters
a3	3 alphabetic characters, fixed length
n3	3 numeric characters, fixed length
an3	3 alphanumeric characters, fixed length
a..3	up to 3 alphabetic characters
n..3	up to 3 numeric characters
an..3	up to 3 alphanumeric characters

C.3.2 Index of service simple data elements by tag

TAG	Name
0001	Syntax identifier
0002	Syntax version number
0004	Interchange sender identification
0007	Identification code qualifier
0008	Interchange sender internal identification
0010	Interchange recipient identification
0014	Interchange recipient internal identification
0017	Date
0019	Time
0020	Interchange control reference
0022	Recipient reference/password
0025	Recipient reference/password qualifier
0026	Application reference
0029	Processing priority code
0031	Acknowledgement request
0032	Interchange agreement identifier
0035	Test indicator
0036	Interchange control count
0038	Message group identification

0040	Application sender identification
0042	Interchange sender internal sub-identification
0044	Application recipient identification
0046	Interchange recipient internal sub-identification
0048	Group reference number
0051	Controlling agency, coded
0052	Message version number
0054	Message release number
0057	Association assigned code
0058	Application password
0060	Group control count
0062	Message reference number
0065	Message type
0068	Common access reference
0070	Sequence of transfers
0073	First and last transfer
0074	Number of segments in a message
0080	Service code list directory version number
0081	Section identification
0087	Anti-collision segment group identification
0110	Code list directory version number
0113	Message type sub-function identification
0115	Message subset identification
0116	Message subset version number
0118	Message subset release number
0121	Message implementation guideline identification
0122	Message implementation guideline version number
0124	Message implementation guideline release number
0127	Scenario identification
0128	Scenario version number
0130	Scenario release number
0133	Character encoding, coded
0135	Service segment tag, coded
0300	Initiator control reference
0303	Initiator reference identification
0304	Responder control reference
0306	Transaction control reference
0311	Dialogue identification
0314	Event time
0320	Sender sequence number
0323	Transfer position, coded
0325	Duplicate indicator
0331	Report function, coded
0332	Report reason text
0333	Report reason, coded
0335	Report language, coded

0336	Time offset
0338	Event date
0340	Interactive message reference number
0342	Dialogue version number
0344	Dialogue release number
0800	Package reference number
0802	Reference identification number
0805	Object type qualifier
0808	Object type attribute
0809	Object type attribute identification
0810	Length of object in octets of bits
0813	Reference qualifier
0814	Number of segments before object

C.3.3 Index of service simple data elements by name

TAG	Name
0031	Acknowledgement request
0087	Anti-collision segment group identification
0058	Application password
0044	Application recipient identification
0026	Application reference
0040	Application sender identification
0057	Association assigned code
0133	Character encoding, coded
0110	Code list directory version number
0068	Common access reference
0051	Controlling agency, coded
0017	Date
0311	Dialogue identification
0344	Dialogue release number
0342	Dialogue version number
0325	Duplicate indicator
0338	Event date
0314	Event time
0073	First and last transfer
0060	Group control count
0048	Group reference number
0007	Identification code qualifier
0300	Initiator control reference
0303	Initiator reference identification
0340	Interactive message reference number
0032	Interchange agreement identifier
0036	Interchange control count
0020	Interchange control reference
0010	Interchange recipient identification

0014	Interchange recipient internal identification
0046	Interchange recipient internal sub-identification
0004	Interchange sender identification
0008	Interchange sender internal identification
0042	Interchange sender internal sub-identification
0810	Length of object in octets of bits
0038	Message group identification
0121	Message implementation guideline identification
0124	Message implementation guideline release number
0122	Message implementation guideline version number
0062	Message reference number
0054	Message release number
0115	Message subset identification
0118	Message subset release number
0116	Message subset version number
0065	Message type
0113	Message type sub-function identification
0052	Message version number
0814	Number of segments before object
0074	Number of segments in a message
0808	Object type attribute
0809	Object type attribute identification
0805	Object type qualifier
0800	Package reference number
0029	Processing priority code
0022	Recipient reference/password
0025	Recipient reference/password qualifier
0802	Reference identification number
0813	Reference qualifier
0331	Report function, coded
0335	Report language, coded
0332	Report reason text
0333	Report reason, coded
0304	Responder control reference
0127	Scenario identification
0130	Scenario release number
0128	Scenario version number
0081	Section identification
0320	Sender sequence number
0070	Sequence of transfers
0080	Service code list directory version number
0135	Service segment tag, coded
0001	Syntax identifier
0002	Syntax version number
0035	Test indicator

C.3.4 Service simple data element specifications

   0001   SYNTAX IDENTIFIER

  Desc: Coded identification of the agency controlling the syntax, and of the
       character repertoire used in an interchange.

  Repr: a4

  Note 1: The data value consists of the letters 'UN', upper case,
        identifying the syntax controlling agency, directly followed by an
        a2 code identifying the character repertoire used.

   0002   SYNTAX VERSION NUMBER

  Desc: Version number of the syntax.

  Repr: an1

  Note 1: Shall be '4' to indicate this version of the syntax.

   0004   INTERCHANGE SENDER IDENTIFICATION

  Desc: Name or coded identification of the sender of the interchange.

  Repr: an..35

  Note 1: Organisation code or name as agreed between interchange partners.
  Note 2: If coded representation is used, its source may be specified by the
        qualifier in data element 0007.

   0007   IDENTIFICATION CODE QUALIFIER

  Desc: Qualifier referring to the identification code.

  Repr: an..4

  Note 1: A qualifier code may refer to an organisation identification as in
        ISO 6523.

   0008   INTERCHANGE SENDER INTERNAL IDENTIFICATION

  Desc: Identification of (for example, a division, branch or computer
       system/process) specified by the sender of interchange, to be
       included if agreed, by the recipient in response interchanges, to
       facilitate internal routing.

  Repr: an..35

0010   INTERCHANGE RECIPIENT IDENTIFICATION

Desc: Name or coded identification of the recipient of the interchange.

Repr: an..35

Note 1: Organisation code or name as agreed between interchange partners.
Note 2: If coded representation is used, its source may be specified by the
        qualifier in data element 0007.

0014   INTERCHANGE RECIPIENT INTERNAL IDENTIFICATION

Desc: Identification of (for example, a division, branch or computer
      system/process) specified by the recipient of interchange, to be
      included if agreed, by the sender in response interchanges, to
      facilitate internal routing.

Repr: an..35

0017   DATE

Desc: Local date when an interchange or a group was prepared.

Repr: n8

Note 1: Format is CCYYMMDD.

0019   TIME

Desc: Local time of day when an interchange or a group was prepared.

Repr: n4

Note 1: Format is HHMM in 24 hour clock.

0020   INTERCHANGE CONTROL REFERENCE

Desc: Unique reference assigned by the sender to an interchange.

Repr: an..14

```
0022   RECIPIENT REFERENCE/PASSWORD
```

Desc: Reference or password to the recipient's system or to a third party
      network as specified in the partners' interchange agreement.

Repr: an..14

Note 1: To be used as specified in the partners' interchange agreement. It
        may be qualified by data element 0025.

```
0025   RECIPIENT REFERENCE/PASSWORD QUALIFIER
```

Desc: Qualifier for the recipient's reference or password.

Repr: an2

Note 1: To be used as specified in the partners' interchange agreement.

```
0026   APPLICATION REFERENCE
```

Desc: Identification of the application area assigned by the sender, to
      which the messages in the interchange relate e.g. the message type,
      if all the messages in the interchange are of the same type.

Repr: an..14

Note 1: Identification of the application area (e.g. accounting,
        purchasing) or of the message type, as applicable.

```
0029   PROCESSING PRIORITY CODE
```

Desc: Code determined by the sender requesting processing priority for the
      interchange.

Repr: a1

Note 1: To be used as specified in the partners' interchange agreement.

   0031   ACKNOWLEDGEMENT REQUEST

   Desc: Code requesting acknowledgement for the interchange.

   Repr: n1

   Note 1: Used if the sender requests that a message related to syntactical
           correctness be sent by the recipient in response.
   Note 2: For UN/EDIFACT a specific message (Syntax and service report -
           CONTRL) is defined for this purpose.

   0032   INTERCHANGE AGREEMENT IDENTIFIER

   Desc: Identification by name or code of the type of agreement under which
         the interchange takes place.

   Repr: an..35

   Note 1: Name or code to be specified in the partners' interchange
           agreement.

   0035   TEST INDICATOR

   Desc: Indication that the structural level containing the test indicator is
         a test.

   Repr: n1

   0036   INTERCHANGE CONTROL COUNT

   Desc: The number of messages and packages in an interchange or, if used,
         the number of groups in an interchange.

   Repr: n..6

   0038   MESSAGE GROUP IDENTIFICATION

   Desc: Identification of the single message type in the group.

   Repr: an..6

   Note 1: This data element will be deleted from the next version of the
           standard. Therefore its use is not recommended.

   0040   APPLICATION SENDER IDENTIFICATION

  Desc: Name or coded identification of the application sender (for example,
       a division, branch or computer system/process).

  Repr: an..35

   0042   INTERCHANGE SENDER INTERNAL SUB-IDENTIFICATION

  Desc: Sub-level of sender internal identification, when further sub-level
       identification is required.

  Repr: an..35

   0044   APPLICATION RECIPIENT IDENTIFICATION

  Desc: Name or coded identification of the application recipient (for
       example, a division, branch or computer system/process).

  Repr: an..35

   0046   INTERCHANGE RECIPIENT INTERNAL SUB-IDENTIFICATION

  Desc: Sub-level of recipient internal identification, when further
       sub-level identification is required.

  Repr: an..35

   0048   GROUP REFERENCE NUMBER

  Desc: Unique reference number for the group within an interchange.

  Repr: an..14

   0051   CONTROLLING AGENCY, CODED

  Desc: Code identifying a controlling agency.

  Repr: an..3

   0052   MESSAGE VERSION NUMBER

  Desc: Version number of a message type.

  Repr: an..3

   0054   MESSAGE RELEASE NUMBER

   Desc: Release number within the current message version number.

   Repr: an..3

   0057   ASSOCIATION ASSIGNED CODE

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

   Repr: an..6

   0058   APPLICATION PASSWORD

   Desc: Password to the recipient's division, department or sectional
         application system/process.

   Repr: an..14

   0060   GROUP CONTROL COUNT

   Desc: The number of messages and packages in the group.

   Repr: n..6

   0062   MESSAGE REFERENCE NUMBER

   Desc: Unique message reference assigned by the sender.

   Repr: an..14

   0065   MESSAGE TYPE

   Desc: Code identifying a type of message and assigned by its controlling
         agency.

   Repr: an..6

   Note 1: In UNSMs (United Nations Standard Messages), the representation is
           a6.

0068   COMMON ACCESS REFERENCE

Desc: Reference serving as a key to relate all subsequent transfers of data
      to the same business case or file.

Repr: an..35

0070   SEQUENCE OF TRANSFERS

Desc: Number assigned by the sender indicating the transfer sequence of a
      message related to the same topic. The message could be an addition
      or a change to an earlier transfer related to the same topic.

Repr: n..2

Note 1: The first message in the sequence shall be assigned as number 1.

0073   FIRST AND LAST TRANSFER

Desc: Indication used for the first and last message in a sequence of
      messages related to the same topic.

Repr: a1

0074   NUMBER OF SEGMENTS IN A MESSAGE

Desc: The number of segments in a message body, plus the message header
      segment and message trailer segment.

Repr: n..10

0080   SERVICE CODE LIST DIRECTORY VERSION NUMBER

Desc: Version number of the service code list directory.

Repr: an..6

0081   SECTION IDENTIFICATION

Desc: Identification of the separation of sections of a message.

Repr: a1

0087   ANTI-COLLISION SEGMENT GROUP IDENTIFICATION

Desc: To identify uniquely an anti-collision segment group in a message.

Repr: an..4

Note 1: The value of this data element shall be the segment group number of
         the UGH/UGT segment group as stated in the message specification.

0110   CODE LIST DIRECTORY VERSION NUMBER

Desc: Version number of the code list directory.

Repr: an..6

0113   MESSAGE TYPE SUB-FUNCTION IDENTIFICATION

Desc: Code identifying a sub-function of a message type.

Repr: an..6

Note 1: The code qualifies the message type data element (0065) to allow
         the recipient to identify a specific sub-function of a message.

0115   MESSAGE SUBSET IDENTIFICATION

Desc: Coded identification of a message subset, assigned by its controlling
       agency.

Repr: an..14

0116   MESSAGE SUBSET VERSION NUMBER

Desc: Version number of the message subset.

Repr: an..3

0118   MESSAGE SUBSET RELEASE NUMBER

Desc: Release number within the message subset version number.

Repr: an..3

```
-------------------------------------------------------------------------------

   0121   MESSAGE IMPLEMENTATION GUIDELINE IDENTIFICATION

   Desc: Coded identification of the message implementation guideline,
         assigned by its controlling agency.

   Repr: an..14

-------------------------------------------------------------------------------

   0122   MESSAGE IMPLEMENTATION GUIDELINE VERSION NUMBER

   Desc: Version number of the message implementation guideline.

   Repr: an..3

-------------------------------------------------------------------------------

   0124   MESSAGE IMPLEMENTATION GUIDELINE RELEASE NUMBER

   Desc: Release number within the message implementation guideline version
         number.

   Repr: an..3

-------------------------------------------------------------------------------

   0127   SCENARIO IDENTIFICATION

   Desc: Code identifying scenario.

   Repr: an..14

-------------------------------------------------------------------------------

   0128   SCENARIO VERSION NUMBER

   Desc: Version number of a scenario.

   Repr: an..3

-------------------------------------------------------------------------------

   0130   SCENARIO RELEASE NUMBER

   Desc: Release number within the scenario version number.

   Repr: an..3

-------------------------------------------------------------------------------
```

0133   CHARACTER ENCODING, CODED

Desc: Coded identification of the character encoding used in the
      interchange.

Repr: an..3

Note 1: To be used as specified in the partners' interchange agreement, for
        the purpose of identifying the character repertoire encoding
        technique used in the interchange (when the default encoding
        defined by the character repertoire's associated character set
        specification is not used).

0135 SERVICE SEGMENT TAG, CODED

Desc: Code identifying a service segment.

Repr: an..3

0300   INITIATOR CONTROL REFERENCE

Desc: A reference assigned by the dialogue initiator.

Repr: an..35

0303   INITIATOR REFERENCE IDENTIFICATION

Desc: Organisation code or name assigned by the party that initiated the
      transaction or dialogue.

Repr: an..35

0304   RESPONDER CONTROL REFERENCE

Desc: A reference assigned by the dialogue responder.

Repr: an..35

0306   TRANSACTION CONTROL REFERENCE

Desc: A reference assigned by the transaction initiator.

Repr: an..35

   0311   DIALOGUE IDENTIFICATION

   Desc: Code identifying a dialogue.

   Repr: an..14

   0314   EVENT TIME

   Desc: Time of event.

   Repr: an..15

   Note 1: Format is HHMMSS... with up to 9 more digits of precision. A 'Z' as
           the last character indicates UTC time. (ISO 8601)

   0320   SENDER SEQUENCE NUMBER

   Desc: Identification of the sequence number of the message or package
         within the sender interchange.

   Repr: n..6

   0323   TRANSFER POSITION, CODED

   Desc: Indication of the position of a transfer.

   Repr: a1

   0325   DUPLICATE INDICATOR

   Desc: Indication that the structure is a duplicate of a previously sent
         structure.

   Repr: a1

   0331   REPORT FUNCTION, CODED

   Desc: Coded value identifying type of status or error report.

   Repr: an..3

   0332   REPORT REASON TEXT

   Desc: Textual explanation of the reason for the status or error report.

   Repr: an..70

0333   REPORT REASON, CODED

Desc: Code identifying the reason for the status or error report.

Repr: an..3

0335   REPORT LANGUAGE, CODED

Desc: Coded identification of language.

Repr: an..3

Note 1: The code list for this data element is maintained by ISO (ISO 639).

0336   TIME OFFSET

Desc: UTC (Universal Co-ordinated Time) offset from event time.

Repr: n4

Note 1: Format is HHMM. Shall be prefixed with '-' for negative offsets.
        (ISO 8601)

0338   EVENT DATE

Desc: Date of event.

Repr: n..8

Note 1: Format is YYMMDD or CCYYMMDD.

0340   INTERACTIVE MESSAGE REFERENCE NUMBER

Desc: Unique interactive message reference assigned by the sender.

Repr: an..35

0342   DIALOGUE VERSION NUMBER

Desc: Version number of a dialogue.

Repr: an..3

0344   DIALOGUE RELEASE NUMBER

Desc: Release number of a dialogue.

Repr: an..3

0800   PACKAGE REFERENCE NUMBER

Desc: Unique package reference number assigned by the sender.

Repr: an..35

0802   REFERENCE IDENTIFICATION NUMBER

Desc: Reference number to identify a message, message group and/or
      interchange, which relates to the object.

Repr: an..35

0805   OBJECT TYPE QUALIFIER

Desc: Qualifier referring to the type of object.

Repr: an..3

0808   OBJECT TYPE ATTRIBUTE

Desc: The attribute applying to the object type.

Repr: an..256

0809   OBJECT TYPE ATTRIBUTE IDENTIFICATION

Desc: Coded identification of the attribute applying to the object type.

Repr: an..256

0810   LENGTH OF OBJECT IN OCTETS OF BITS

Desc: Count of the number of octets of bits in the object.

Repr: n..18

Note 1: The count shall exclude the segment terminator of the preceding
        EDIFACT structured segment and the first character ('U') of the
        following EDIFACT structured segment.

0813   REFERENCE QUALIFIER

Desc: Code giving specific meaning to a reference identification number.

Repr: an..3

```
0814   NUMBER OF SEGMENTS BEFORE OBJECT

Desc: A count of the number of segments appearing between the UNO segment
      and the start of the object.

Repr: n..3
```

Annex D
(informative)

Service code directory

The service code directory is maintained by the UN/ECE and is part of the UN Trade Data Interchange Directory (UNTDID) and as such is not reproduced in this International Standard. The most recent version of the service code directory should be used to reference the code values for the coded data elements in the simple data element directory (see annex C within this part). The UNTDID is updated and published at regular intervals.

Annex E
(informative)

Order of segments and groups of segments within a message

E.1 General

Segments used in a message appear in the sequence (top to bottom) specified in the message segment table.

In the message segment table, segments are indicated by their tags. The requirement for their inclusion in the message i.e. their status, is indicated by the letter M for mandatory or C for conditional. The number of times a segment may occur in each instance is indicated directly thereafter. This may be followed by any associated dependency note identifier(s).

In the message segment table, segment groups are indicated by their segment group number. The requirement for their inclusion in the message i.e. their status, is indicated by the letter M for mandatory or C for conditional. The number of times a segment group may occur in each instance is indicated directly thereafter. This may be followed by any associated dependency note identifier(s).

E.2 Segment groups

Two or more segments can be grouped, as shown in figure E.1. The trigger segment of each segment group appears in the message segment table immediately following the segment group identification (i.e. segment group 1, 2 etc.). All other segments within the segment group follow in sequence, with the last segment in the group identified by the boundary lines specifying the extent of the segment group.

A segment group can contain another dependent segment group or groups (e.g. segment group 2 contains a dependent segment group 3 in the figure), and, as can be seen in the figure, a segment can terminate two (or more) segment groups, as indicated by the segment group boundary lines (segment LLL in the figure.)

In the figure, segment group 2 is the parent of segment group 3, and segment group 3 is the parent of segment group 4.

E.2.1 Figure E.1

```
--------------------------------------------------------------------------

POS    TAG    Name                                    S   R           Notes

0010   Uxx    Message header                          M   1
0020   AAA    Segment AAA name                        M   1
0030   BBB    Segment BBB name                        C   9
0040   CCC    Segment CCC name                        C   9

0050   ---------- Segment group 1 ----------------- C   999  -------+ 1
0060   DDD    Segment DDD name                        M   1           |
0070   EEE    Segment EEE name                        C   9           |
0080   FFF    Segment FFF name                        C   9           |
0090   GGG    Segment GGG name                        C   1    -------+

0100   ---------- Segment group 2 ----------------- C   9    -------+ 1
0110   HHH    Segment HHH name                        M   1           |
                                                                      |
0120   ---------- Segment group 3 ----------------- C   9    ------++
0130   III    Segment III name                        M   1          ||
0140   JJJ    Segment JJJ name                        C   9          ||
                                                                     ||
0150   ---------- Segment group 4 ----------------- C   9    -----+||
0160   KKK    Segment KKK name                        M   1          |||
0170   LLL    Segment LLL name                        C   9    -----+++
  .
  .
  .
  .
nnnn   Uxx    Message trailer                         M   1

DEPENDENCY NOTES:

1.  D3(0050, 0100) One or more

--------------------------------------------------------------------------
```

Figure E.1 - Example message segment table

Legend

POS   The sequential position number of the segment or segment group in the message
           (in steps of 10 to permit later amendment to message structures)

TAG   The tag of the segment in the message

Name   The name of the segment in the message

S   The status (of the segment or segment group) i.e. M = Mandatory, C = Conditional

R   The maximum number of occurrences of the segment or segment group

Notes   The note number

E.2.2 Figure E.1 Notes

1.   An example of the processing/sequencing order of the segments (using the segment tags only) is as follows (with segment group 1 appearing twice, the other groups once, and with repeating segments shown as appearing once only):

     `Uxx,AAA,BBB,CCC,DDD,EEE,FFF,GGG,DDD,EEE,FFF,GGG,HHH,III,JJJ,KKK,LLL,...Uxx`

2.   In the segment table and in the segment string shown above, the first "Uxx Message Header" would be "UNH" for batch EDI, and "UIH" for interactive EDI; the second "Uxx Message trailer" would be "UNT" for batch EDI and "UIT" for interactive EDI.

3.   As is shown, dependency notes at the message level (note 1 in figure E.1) can be specified in the message segment table (which in UN/EDIFACT form part of the message specification).
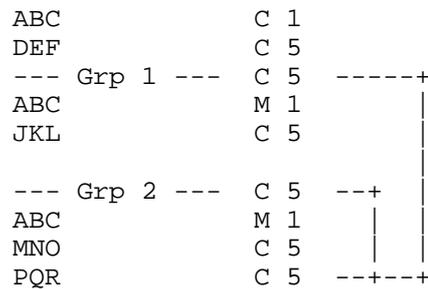
Annex F
(informative)

The use of anti-collision segment group UGH/UGT

F.1   Introduction

This annex outlines the use of the segment group UGH/UGT to prevent segment collision. This technique should only be used after alternative approaches have been deemed unsuccessful.

F.2   The Problem

Example 1:

```
ABC                 C 1
DEF                 C 5
--- Grp 1 ---  C 5  -----+
ABC                 M 1       |
JKL                 C 5       |
                              |
--- Grp 2 ---  C 5  --+  |
ABC                 M 1    |  |
MNO                 C 5    |  |
PQR                 C 5  --+--+
```

The example above shows a message structure that uses 5 different segments in 7 positions. Segment ABC is used in 3 different positions.
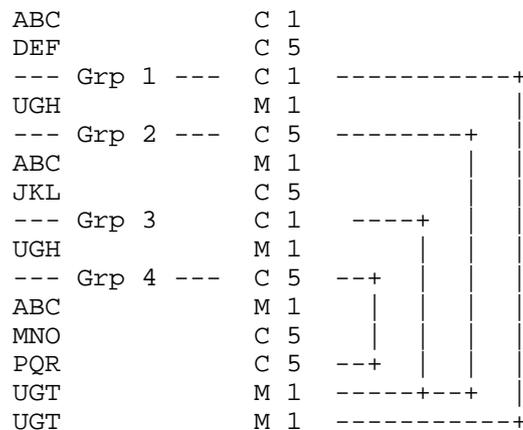
The data stream may look like this:

ABC+...'DEF+...'ABC+...'JKL+...'ABC+...'MNO+...'PQR+...'ABC+...'

The problem of segment collision now exists, since it is not clear if the first ABC segment is the stand-alone segment or the start of Group 1. Further, it is not clear whether the ABC segment after the JKL is the start of Group 2 or the start of Group 1.

The use of the UGH/UGT segment groups will correct this situation. The correct way to place the UGH/UGT group is to envelop the inner-most segment group, of those groups having the problem.

Example 2:

```
ABC                 C 1
DEF                 C 5
--- Grp 1 ---  C 1  ----------+
UGH                 M 1            |
--- Grp 2 ---  C 5  --------+  |
ABC                 M 1          |  |
JKL                 C 5          |  |
--- Grp 3      C 1    ----+  |  |
UGH                 M 1        |  |  |
--- Grp 4 ---  C 5  --+  |  |  |
ABC                 M 1    |  |  |  |
MNO                 C 5    |  |  |  |
PQR                 C 5  --+  |  |  |
UGT                 M 1  -----+--+  |
UGT                 M 1  ----------+
```

An instance of the data stream may look like this:

ABC+...'DEF+...'UGH+1'ABC+...'JKL+...'UGH+3'ABC+...'MNO+...'PQR+...'ABC+...'UGT+3'UGT+1'

In table form, the sample data stream would be as follows:

Data stream value	Description
ABC+…'DEF+…'	Stand-alone segments
UGH+1'	Start of Group 1, signals the start of Group 2
ABC+…'JKL+…'	Group 2
UGH+3'	Start of Group 3, signals the start of Group 4
ABC+…'MNO+…'PQR+…'	Group 4
ABC+…'	Group 4
UGT+3'	End of Group 3, signals the end of Group 4
UGT+1'	End of Group 1, signals the end of Group 2

Now it is clear that the ABC after JKL is the start of Group 4 and the ABC after PQR is the second occurrence of Group 4, since there was no UGT after the PQR.

Considering a more detailed instance of the data stream:

ABC+...'DEF+...'UGH+1'ABC+...'JKL+...'UGH+3'ABC+...'MNO+...'PQR+...'UGT+3'ABC+...'JKL+...'
UGH+3'ABC+...'MNO+...'PQR+...'ABC+...'MNO+...'PQR+...'ABC+...'MNO+...'PQR+...'UGT+3'UGT+1'

In table form, the sample data stream would be as follows:

Data stream value	Description
ABC+…'DEF+…'	Stand-alone segments
UGH+1'	Start of Group 1, signals the start of Group 2
ABC+…'JKL+…'	Group 2
UGH+3'	Start of Group 3, signals the start of Group 4
ABC+…'MNO+…'PQR+…'	Group 4
UGT+3'	End of Group 3, signals the end of Group 4
ABC+…'JKL+…'	Group 2
UGH+3'	Start of Group 3, signals the start of Group 4
ABC+…'MNO+…'PQR+…'	Group 4
ABC+…'MNO+…'PQR+…'	Group 4
ABC+…'MNO+…'PQR+…'	Group 4
UGT+3'	End of Group 3, signals the end of Group 4
UGT+1'	End of Group 1, signals the end of Group 2

In the above example, Group 2 occurred twice. Within its first occurrence, Group 4 occurred once, and within its second occurrence, Group 4 occurred three times.