Electronic data interchange for administration, commerce and transport (EDIFACT) - Application level syntax rules

Part 8:
Associated data in EDI
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Foreword

(To be amended as necessary, according to ISO procedures)

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75% approval by the member bodies voting.

International Standard ISO 9735 Release 2 was prepared by the UN/ECE Trade Division (as UN/EDIFACT) and was adopted, under the “fast-track procedure” as an existing standard, by Technical Committee ISO TC 154, Documents and data elements in administration; commerce and industry.

ISO/IEC 9735 consists (currently) of the following parts, under the general title Electronic data interchange for administration, commerce and transport (EDIFACT) - Application level syntax rules:

- ISO 9735-1 - Syntax rules common to all parts, together with syntax service directories for each of the parts
- ISO 9735-2 - Syntax rules specific to batch EDI
- ISO 9735-3 - Syntax rules specific to interactive EDI
- ISO 9735-4 - Syntax and service report message for batch EDI (message type - CONTRL)
- ISO 9735-5 - Security rules for batch EDI (authenticity, integrity and non-repudiation of origin)
- ISO 9735-6 - Secure authentication and acknowledgement message (message type - AUTACK)
- ISO 9735-7 - Security rules for batch EDI (confidentiality)
- ISO 9735-8 - Associated data in EDI
- ISO 9735-9 - Security key and certificate management message (message type - KEYMAN)

Further parts may be added in the future.
Introduction

This International Standard 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.

These syntax rules 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 standard.

This is a new part, which has been added to ISO 9735. It provides an optional capability of associating a package of data, which contains an object bounded by EDIFACT service segments as envelopes. The object data is not structured in the way in which a normal EDIFACT message is structured.

The option permits the transfer within an EDIFACT interchange of data which can be created by other applications (such as STEP, CAD, etc.), and which cannot be carried by means of an EDIFACT message.

Within an interchange, the package may be related to an EDIFACT message contained within the same interchange. In addition, packages may be contained in groups, which may contain messages and packages, or only packages. Lastly, an interchange may contain solely a package (or packages).

Package(s) transferred in an EDIFACT interchange may or may not be related to an EDIFACT message (or messages) contained in the same or a different interchange.
Electronic data interchange for administration, commerce and transport (EDIFACT) - Application level syntax rules

Part 8:
Associated data in EDI

1 Scope

This part of ISO 9735 specifies syntax rules for associated data in EDI to be interchanged between computer application systems. This provides a method to transfer data which cannot be carried by means of either a batch or interactive EDIFACT message. The data may be created by other applications (such as STEP, CAD, etc.), and is referred to in this part as associated data.

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 to this part shall include conformance to Part 1, and conformance to Part 2 or Part 3 of this International Standard.

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

3 Normative references

There are no other standards which, through reference in this text, constitute provisions of this part of this International Standard.

4 Definitions

For the purpose of this part of this International Standard, the definitions in Part 1 annex A apply.
5 Associated data within an EDI interchange

5.1 Associated data within a batch EDI interchange

Figure 1a - Associated data within a batch EDI interchange (Schematic)
An **INTERCHANGE** contains:
- UNA, Service String Advice, if used
- UNB, Interchange Header
- Either: Only group(s)  Or: Only message(s) and/or package(s)
- UNZ, Interchange Trailer

A **GROUP** contains:
- UNG, Group Header
- message(s) and/or package(s)
- UNE, Group Trailer

A **MESSAGE** contains:
- UNH, Message Header
- a message body
- UNT, Message Trailer

A **PACKAGE** contains:
- UNO, Object Header
- an object
- UNP, Object Trailer

A **MESSAGE BODY** contains:
- segment(s) and/or segment group(s)

An **OBJECT** contains:
- a stream of octets

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**Figure 1b** - Associated data within a batch EDI interchange (Legend)
5.1.1 Structures for batch EDI

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.

The service string advice (if used) and the header and trailer service segments shall appear in a batch EDI interchange in the order shown below:

<table>
<thead>
<tr>
<th>Name</th>
<th>Tag</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service String Advice</td>
<td>UNA</td>
<td>Conditional</td>
</tr>
<tr>
<td>Interchange Header</td>
<td>UNB</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Group Header</td>
<td>UNG</td>
<td>Conditional</td>
</tr>
<tr>
<td>Message Header or Object Header</td>
<td>UNH or UNO</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Message Body or Object</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Object</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Message Trailer or Object Trailer</td>
<td>UNT or UNP</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Group Trailer</td>
<td>UNE</td>
<td>Conditional</td>
</tr>
<tr>
<td>Interchange Trailer</td>
<td>UNZ</td>
<td>Mandatory</td>
</tr>
</tbody>
</table>

In the diagram above, the lines to the left show the pairing of header and trailer segments. For simplicity, an interchange containing only one group and one message/package is shown.

For the specification of the service string advice see Part 1 annex B.

For the specification of the header and trailer segments see Part 1 annex C.

NOTE - Segments for use in UN/EDIFACT messages are defined in the United Nations Trade Data Interchange Directory (UNTDID).
5.2 Associated data within an interactive EDI interchange

Figure 2a - Associated data within an interactive EDI interchange (Schematic)
An **INTERCHANGE** contains:
- UNA, Service String Advice, if used.
- UIB, Interactive Interchange Header
- message(s)/package(s)
- UIZ, Interactive Interchange Trailer

A **MESSAGE** contains:
- UIH, Interactive Message Header
- a message body
- UIT, Interactive Message Trailer

A **PACKAGE** contains:
- UNO, Object Header
- an object
- UNP, Object Trailer

A **MESSAGE BODY** contains:
- segment(s) and/or segment group(s)

An **OBJECT** contains:
- a stream of octets

---

**Figure 2b** - Associated data within an interactive EDI interchange (Legend)
5.2.1 Structures for interactive EDI

An interactive interchange shall contain only:

- Messages, or
- Packages, or
- Messages and Packages.

The service string advice (if used) and the header and trailer service segments shall appear in an interactive EDI interchange in the order shown below:

<table>
<thead>
<tr>
<th>Name</th>
<th>Tag</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service String Advice</td>
<td>UNA</td>
<td>Conditional</td>
</tr>
<tr>
<td>Interactive Interchange Header</td>
<td>UIB</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Interactive Message Header or</td>
<td>UIH or UNO</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Object Header</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactive Message Trailer or</td>
<td>UIT or UNP</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Object Trailer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactive Interchange Trailer</td>
<td>UIZ</td>
<td>Mandatory</td>
</tr>
</tbody>
</table>

In the diagram above, the lines to the left show the pairing of header and trailer segments. For simplicity, an interchange containing only one message/package is shown.

For the specification of the service string advice see Part 1 annex B.

For the specification of the interactive interchange; interactive message; and object; header and trailer segments, see Part 1 annex C.

NOTE - Segments for use in UN/EDIFACT messages are defined in the United Nations Trade Data Interchange Directory (UNTDID).
5.3 Package content

A package shall comprise an object header segment (UNO), an object, and an object trailer segment (UNP).

The character repertoire of an object is not governed by the character repertoire identified in the interchange header.

Syntax rules shall not be applied to the data representing the object (i.e. should any service characters appear in the object, they shall not be preceded by the syntax release character).

5.4 Object referencing

To convey objects within the interchange structure, there is a requirement to provide adequate referencing capabilities properly to relate the object(s) and the associated message(s).

Reference to an object shall be made by specifying its object identification number in S020 of the UNO segment.

Note: For UN/EDIFACT messages an RFF segment shall be used to identify the object identification number attributable to one object. The object identification number assigned should be unique for a sufficient time to avoid any confusion. There may be many RFF segment occurrences used to identify all applicable objects.