INTERNATIONAL STANDARD

ISO 9735-3

Second edition 2002-07-01

Electronic data interchange for administration, commerce and transport (EDIFACT) — Application level syntax rules (Syntax version number: 4, Syntax release number: 1) —

iTeh Part DARD PREVIEW Syntax rules specific to interactive EDI

Échange de données informatisé pour l'administration, le commerce et le transport (EDIFACT) — Règles de syntaxe au niveau de l'application (numéro de version de syntaxe: 4, numéro d'édition de syntaxe: 1) —

Partie 3: Règles de syntaxe spécifiques à l'EDI interactif



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Foreword

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 9735 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 9735-3 was prepared by Technical Committee ISO/TC 154, *Processes, data elements and documents in commerce, industry and administration* in collaboration with UN/CEFACT through the Joint Syntax Working Group (JSWG).

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This second edition cancels and replaces the first edition (ISO 9735-3:1998). However ISO 9735:1988 and its Amendment 1:1992 are provisionally retained for the reasons given in clause 2.

Furthermore, for maintenance reasons the Syntax service directories have been removed from all parts of the ISO 9735 series. They are now consolidated in a new part, ISO 9735-10:682-2462-4458-

At the time of publication of ISO 9735-1:1998, ISO 9735-10 had been allocated as a part for "Security rules for interactive EDI". This was subsequently withdrawn because of lack of user support, and as a result, all relevant references to the title "Security rules for interactive EDI" were removed in this second edition of ISO 9735-3.

Definitions from all parts of the ISO 9735 series have been consolidated and included in ISO 9735-1.

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, Syntax release number: 1):*

- Part 1: Syntax rules common to all 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)
- Part 10: Syntax service directories

Further parts may be added in the future.

Annexes A, B and C of this part of ISO 9735 are for information only.

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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 interactive messages, the message design rules for interactive usage apply. These rules are maintained in the UNTDID.

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

This is a new part, which has been added to ISO 9735. It provides for the exchange of EDIFACT messages in an interactive (conversational) EDI environment.

Interactive EDI (I-EDI) is characterized by the following:

- a formalized association between the two parties using a dialogue;
- the ability, dynamically, to direct the course of the I-EDI transaction, depending upon the result of earlier exchanges within the dialogue;

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- short response times; https://standards.iteh.ai/catalog/standards/sist/c3284682-2462-4458-878b-4d00536f1ef1/iso-9735-3-2002
- all the messages exchanged within one dialogue relate to the same business transaction;
- a transaction is a controlled set of dialogues which can take place between two or more parties.

These characteristics differentiate I-EDI from batch EDI which is specified in ISO 9735-2 (syntax rules specific to batch EDI).

For consistency and in order to simplify the implementation of the standard for those users who wish to utilize both batch and interactive processing, this part of ISO 9735 has been aligned as far as possible with ISO 9735-2.

Electronic data interchange for administration, commerce and transport (EDIFACT) — Application level syntax rules (Syntax version number: 4, Syntax release number: 1) —

Part 3:

Syntax rules specific to interactive EDI

1 Scope

This part of ISO 9735 specifies syntax rules specifically for the transfer of interactive messages to be interchanged between computer application systems. For the transfer of packages in an interactive environment, see ISO 9735-8.

2 Conformance iTeh STANDARD PREVIEW

Whereas this part shall use a version number of "4" in the mandatory data element 0002 (Syntax version number), and shall use a release number of "01" in the conditional data element 0076 (Syntax release number), each of which appear 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:

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- ISO 9735:1988: Syntax version number: 1
- ISO 9735:1988 (amended and reprinted in 1990): Syntax version number: 2
- ISO 9735:1988 and its Amendment 1:1992: Syntax version number: 3
- ISO 9735:1998: Syntax version number: 4

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 part of ISO 9735.

Devices supporting this part of ISO 9735 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 of ISO 9735 shall include conformance to ISO 9735-1 and ISO 9735-10.

When identified in this part of ISO 9735, provisions defined in related standards shall form part of the conformance criteria.

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3 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 9735. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 9735 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 9735-1:2002, Electronic data interchange for administration, commerce and transport (EDIFACT) — Application level syntax rules (Syntax version number: 4, Syntax release number: 1) — Part 1: Syntax rules common to all parts

ISO 9735-10:2002, Electronic data interchange for administration, commerce and transport (EDIFACT) — Application level syntax rules (Syntax version number: 4, Syntax release number: 1) — Part 10: Syntax service directories

4 Terms and definitions

For the purposes of this part of ISO 9735, the terms and definitions given in ISO 9735-1 apply.

5 I-EDI interchange structure

The service string advice (if used) and the header and trailer service segments shall appear in an I-EDI interchange in the order shown in Figure 1. (standards.iteh.ai)

Name ISO 9735-3:2002	Tag	Status		
https://standards.iteh.ai/catalog/standards/sist Service string/advice0536flefl/iso-973		162-4458- Conditional		
Interactive interchange header	UIB	Mandatory		
Interactive message header	UIH	Mandatory		
Message body				
Interactive message trailer	UIT	Mandatory		
Interactive interchange trailer	UIZ	Mandatory		

Figure 1 — I-EDI interchange structure

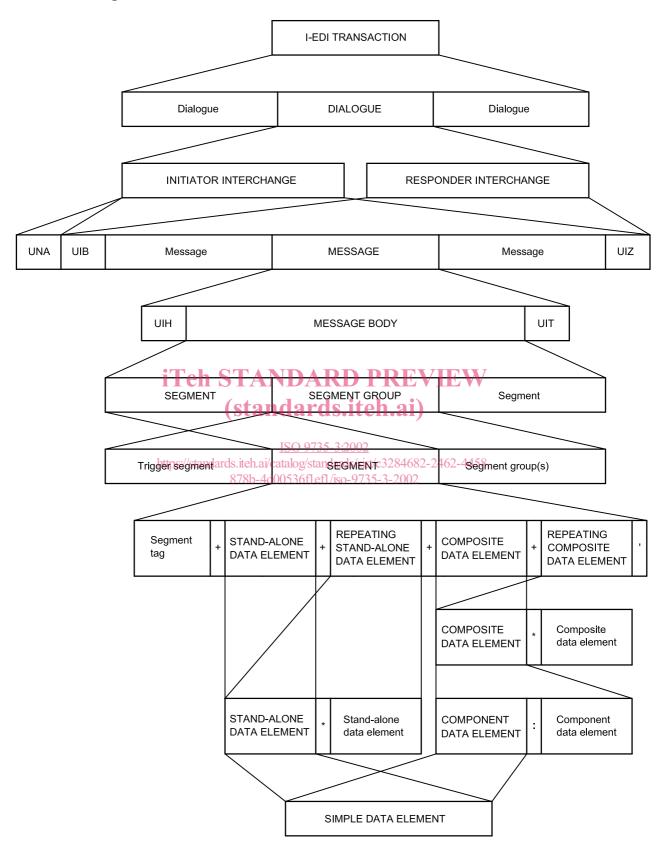
In Figure 1, the lines to the left show the pairing of header and trailer segments. For simplicity, an interchange containing only one message is shown.

For the specification of the service string advice, see ISO 9735-1:2002, annex A.

For the specification of the interactive header and trailer segments, see ISO 9735-10.

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

6 I-EDI message within a transaction



NOTE The default service characters are used for illustrative purposes.

Figure 2 — I-EDI message within a transaction

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Legend:

An I-EDI TRANSACTION contains:

— Dialogue(s)

A **DIALOGUE** contains:

- an Initiator Interchange
- a corresponding Responder Interchange

An INITIATOR INTERCHANGE contains:

- UNA, Service String Advice, if used
- UIB, Interactive Interchange Header
- message(s), if used
- UIZ, Interactive Interchange Trailer

A RESPONDER INTERCHANGE contains:

- UIB, Interactive Interchange Header
- message(s), if used
- UIZ, Interactive Interchange Trailer

A **MESSAGE** contains:

- UIH, Interactive Message Header
- a message body
- UIT, Interactive Message Trailer

A MESSAGE BODY contains Teh STANDARD PREVIEW

— segment(s) and/or segment group(s) tandards.iteh.ai)

A **SEGMENT GROUP** contains:

- a trigger segment

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— segments(s) and possibly segment group (s)talog/standards/sist/c3284682-2462-4458-

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A **SEGMENT** contains:

- a segment tag
- stand-alone data element(s) and/or composite data element(s) and/or repeating stand-alone data element(s) and/or repeating composite data element(s)

A REPEATING STAND-ALONE DATA ELEMENT is:

one or more occurrences of the same stand-alone data element

A REPEATING COMPOSITE DATA ELEMENT is:

one or more occurrences of the same composite data element

A COMPOSITE DATA ELEMENT contains:

two or more component data elements

A COMPONENT DATA ELEMENT is:

- a simple data element

A STAND-ALONE DATA ELEMENT is:

a simple data element

A SIMPLE DATA ELEMENT contains:

a single data element value

Figure 2 — I-EDI message within a transaction (continued)

7 Dialogue control

An I-EDI transaction, which is an instance of a particular scenario, consists of one or more dialogues, occurring either concurrently or sequentially between two or more parties.

A dialogue consists of an interleaved pair of EDIFACT interchanges; an initiator interchange and a responder interchange.

The following transfers shall take place:

- An initiator begins a dialogue by sending an interchange header segment to a responder, optionally preceded by a UNA, and optionally followed by a message.
- The responder replies to the initiator with an interchange header segment, optionally followed by a message (note that the values of the UNA sent by the initiator also apply to the responder).
- The initiator sends a guery message to the responder.
- The responder replies to the initiator with a response message.
- The initiator and responder exchange additional messages, as necessary.
- The initiator ends the dialogue by sending an interchange trailer segment to the responder, optionally preceded by a message.
- The responder replies to the initiator with an interchange trailer segment, optionally preceded by a message.

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The following variations are possible:

For each message from the initiator to the responder there may be zero, one, or more than one message from the responder to the initiator, and vice versals itch a/catalog/standards/sist/c3284682-2462-4458-878b-4d00536fl eff/iso-9735-3-2002

UIR service segments may be interleaved with messages.

A dialogue can be prematurely terminated at any time by either party, by using a UIR service segment.

A message or messages may be combined with:

- the interchange header, or
- the interchange trailer, or
- both the interchange header and the interchange trailer (a complete dialogue).

Whilst exchange of data controlled by the initiator is a common mode of operation for interactive applications, the I-EDI syntax does not exclude other modes of operation.

See annex A for examples.

Figure 3 shows a flow diagram of two interchanges which together form a dialogue.

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INITIATOR INTERCHANGE			RESPONDER INTERCHANGE		
Segment name	Segment tag	Status	Segment name	Segment tag	Status
Service string advice	UNA	C(1)			
Interchange header	UIB	M(1)			
Message(s)	UIHUIT	C(n) _			
		Γ	Interchange header	UIB	M(1)
	-		Message(s)	UIHUIT	C(n)
Message(s)	UIHUIT	C(n) —			
	4		Message(s)	UIHUIT	C(n)
Message(s)	UIHUIT	C(n)			
Interchange trailer	UIZ	M(1)	-		
	_		Message(s)	UIHUIT	C(n)
	iTeh STA	NDA	Interchange trailer	UIZ	M(1)

The arrows indicate the direction of data flow. Note that UNA is only sent by initiator.

The status indicates Mandatory (M) or Conditional (C) together with an indication of allowed repetition.

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Figure 3 — Flow diagram of two I-EDI interchanges