

Australian Standard™

**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**



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Australian Standard™

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

Originated as part of AS/NZS 3801:1995.
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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee IT-001, Information Systems—Interconnection to supersede AS/NZS 3801:1995 (in part). After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard.

This Standard is identical with, and has been reproduced from, 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*.

The objective of this Standard is to specify common syntax rules for the formatting of batch and interactive messages to be interchanged between computer application systems.

This Standard is Part 1 of AS ISO 9735—2003, *Electronic data interchange for administration, commerce and transport (EDIFACT)—Application level syntax rules (Syntax version number: 4, Syntax release number: 1)*, which is published in parts as follows:

Part 1: Syntax rules common to all parts (this Standard)

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

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

As this Standard is reproduced from an international standard, the following applies:

- (a) Its number appears on the cover and title page while the international standard number appears only on the cover.
- (b) In the source text ‘this part of ISO 9735’ should read ‘this Australian Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian Standard</i>	
ISO		AS	
6093	Information processing— Representation of numerical values in character strings for information interchange	3767	Information processing— Representation of numerical values in character strings for information interchange
7498	Information processing systems— Open Systems Interconnection—Basic Reference Model	2777	Information processing systems— Open systems interconnection—Basic reference model
7498-2	Part 2: Security Architecture	2777.2	Part 2: Security architecture

ISO/IEC		AS	
2022	Information technology—Character code structure and extension techniques	1953	Information processing—ISO 7-bit and 8-bit coded character sets—Code extension techniques
2382	Information technology—Vocabulary	1189	Data processing—Vocabulary
2382-1	Part 1: Fundamental terms	1189.1	Part 1: Fundamental terms
2382-4	Part 4: Organization of data	1189.4	Part 4: Organization of data
6429	Information technology—Control functions for coded character sets	2761	Information technology—Control functions for coded character sets
		AS/NZS	
9594	Information technology—Open Systems Interconnection—The Directory	4019	Information technology—Open Systems Interconnection—The Directory
9594-8	Part 8: Authentication framework	4019.8	Part 8: Authentication framework
10646	Information technology—Universal Multiple-Octet Coded Character Set (UCS)	4189	Information technology—Universal Multiple-Octet Coded Character Set (UCS)
10646-1	Part 1: Architecture and Basic Multilingual Plane	4189.1	Part 1: Architecture and Basic Multilingual Plane

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AUSTRALIAN STANDARD

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****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 terms and definitions for all parts of ISO 9735.

2 Conformance

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:

- 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 shall be based on this part of ISO 9735, on ISO 9735-10, and at least either ISO 9735-2 or ISO 9735-3.

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

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/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/IEC 2382-4:1999, *Information technology — Vocabulary — Part 4: Organization of data*

ISO 6093:1985, *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/IEC 6523-1:1998, *Information technology — Structure for the identification of organizations and organization parts — Part 1: Identification of organization identification schemes*

ISO 7498-2:1989, *Information processing systems — Open Systems Interconnection — Basic Reference Model — Part 2: Security Architecture*

ISO/IEC 9594-8:1998, *Information technology — Open Systems Interconnection — The Directory: Authentication framework*

ISO 9735-2:2002, *Electronic data interchange for administration, commerce and transport (EDIFACT) — Application level syntax rules (Syntax version number: 4, Syntax release number: 1) — Part 2: Syntax rules specific to batch EDI*

ISO 9735-3:2002, *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*

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*

ISO/IEC 10646-1:2000, *Information technology — Universal Multiple-Octet Coded Character Set (UCS) — Part 1: Architecture and Basic Multilingual Plane*

ISO/IEC 11770-1:1996, *Information technology — Security techniques — Key management — Part 1: Framework*

ITU-T Recommendation F.400/X.400:1999, *Message handling system and service overview*

4 Terms and definitions

For the purposes of all parts of ISO 9735, the following terms and definitions apply.

NOTE 1 When a word or phrase appears in italics within a definition, this means that a definition for this term is given in this clause.

NOTE 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 caractères alphabétiques”, and will not appear at the same alphabetic place in the two versions of the syntax; the identifier in brackets nevertheless remains “[1]”.

4.1

alphabetic character set

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

4.2

alphanumeric character set

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

4.3

asymmetric algorithm

cryptographic algorithm employing a *public key* and a *private key* which together form an asymmetric key set [3]

4.4

attribute

characteristic of an entity [4]

4.5

authentication

See *data origin authentication* [5]

4.6

batch EDI

electronic data interchange in which no strong requirements exist for formalized data exchange using query and response between the parties [6]

4.7

business

series of processes, each having a clearly understood purpose, involving more than one *organization*, realized through the exchange of information and directed towards some mutually agreed upon goal, extending over a period of time [7]

4.8

certificate

public key of a user, together with some other information, rendered unforgeable by a signature with the *private key* of the *certification authority* which issued it [8]

[ISO/IEC 9594-8:1998, 3.3.3]

4.9

certification authority

authority trusted by one or more users to create and assign *certificates* [9]

[ISO/IEC 9594-8:1998, 3.3.8]

4.10

certification path

ordered sequence of *certificates* of objects in the Directory Information Tree which, together with the *public key* of the initial object in the path, can be processed to obtain that of the final object in the path [10]

[ISO/IEC 9594-8:1998, 3.3.9]

4.11

character

member of a set of elements used for the organization, control, or representation of *data* [11]

[ISO/IEC 10646-1:2001, 4.6]

4.12**character repertoire**

set of *graphic characters* of a *coded character set*, considered independently of its encoding [12]

4.13**code extension**

techniques for the *encoding* of *characters* that are not included in the *character repertoire* of a given *coded character set* [13]

4.14**code list**

complete set of *data element values* of a coded *simple data element* [14]

4.15**code list directory**

listing of identified and specified *code lists* [15]

4.16**coded character set**

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 [16]

[ISO/IEC 6429:1992]

4.17**component data element**

simple data element used within a *composite data element* [17]

4.18**component data element separator**

service character used to separate the *component data elements* within a *composite data element* [18]

4.19**composite data element**

identified, named and structured set of functionally related *component data elements*, as described in a *composite data element specification* [19]

NOTE 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*.

4.20**composite data element directory**

listing of identified and named *composite data elements* with their *composite data element specification* [20]

4.21**composite data element specification**

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* [21]

4.22**conditional**

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 [22]

4.23**confidentiality**

property that information is not made available or disclosed to unauthorized individuals, entities or processes [23]

[ISO 7498-2:1989, 3.3.16]

4.24**control character**

a *character* whose purpose is to effect format, to control data transmission, or to perform other control functions [24]

NOTE A control character, although it is not a graphic character, may have a graphic representation.

[ISO/IEC 2382-4:1999, 04.04.01]

4.25**credential**

data that serves to establish the claimed identity of an entity [25]

[ISO 7498-2:1989, 3.3.17]

4.26**cryptography**

discipline which embodies principles, means, and methods for the transformation of data in order to hide its information content, prevent its undetected modification and/or prevent its unauthorized use [26]

[ISO 7498-2:1989, 3.3.20]

4.27**data**

reinterpretable representation of information in a formalized manner suitable for communication, interpretation or processing [27]

[ISO/IEC 2382-1:1993, 01.01.02]

4.28**data element**

unit of *data* described in a *data element specification* [28]

NOTE There are two classes of data element: *simple data elements* and *composite data elements*.

4.29**data element directory**

listing of identified, named and specified *simple data elements* (*simple data element directory*) or *composite data elements* (*composite data element directory*) [29]

4.30**data element separator**

service character used to separate from each:

- non repeating stand-alone data elements; or
- 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* [30]

4.31**data element specification**

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*) [31]

4.32**data element value**

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* [32]

4.33**data integrity**

property that data has not been altered or destroyed in an unauthorized manner [33]

[ISO 7498-2:1989, 3.3.21]

4.34**data origin authentication**

corroboration that the source of data received is as claimed [34]

[ISO 7498-2:1989, 3.3.22]

4.35**data value representation**

types of *characters* allowed (e.g. alphabetic, numeric) and conditions of length relating to the *data element values* of a *simple data element* [35]

4.36**decimal mark**

character that separates the digits forming the integral part of a number from those forming the fractional part [36]

[ISO 6093:1985, 4.1]

4.37**decipherment**

reversal of a corresponding reversible *encipherment* [37]

[ISO 7498-2:1989, 3.3.23]

4.38**decryption**

See *decipherment* [38]

[ISO 7498-2:1989, 3.3.24]

4.39**default service characters**

set of *characters* used as *service characters* in circumstances where a different set is not defined in the *service string advice* [39]

4.40**dependency identifier**

identifier used in a *dependency note* to specify the type of dependency between the entities listed in the *dependency note* [40]