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Foreword

ISO (the International Organisation for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO and IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical interest. Other international organizations, govermental and non–govermental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 6937 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 2, *Coded character sets*.

This third edition cancels and replaces the second edition (ISO/IEC 6937:1994), which has been technically revised.

Annex A forms an integral part of this International Standard. Annexes B, C, D, E, F, and G are for information only.

Introduction

This International Standard specifies a repertoire of graphic characters and their coded representations, for use in text communication.

Although, in general, text (see 4.16) consists of characters and pictures, this International Standard applies only to text made up of characters.

The specifications are based on 8-bit coding; Annex A specifies the 7-bit code for the character set of this International Standard.

Other annexes include:

a) a description of the method used to define a short identifier for each character specified in this International Standard (Annex B);

b) a summary of the use of non-spacing diacritical marks in combination with letters of the basic Latin alphabetic characters (Annex C);

c) a summary of the use of Latin alphabetic characters in various languages (Annex D);

d) an alternative coded representation of the repertoire with no non-spacing diacritical marks (Annex E);

e) a bibliography (Annex F);

f) a summary of differences between the 1994 (second) edition of ISO/IEC 6937, and the present (third) edition of this International Standard (Annex G).

Information technology - Coded graphic character set for text communication - Latin alphabet

1 Scope

This International Standard

a) specifies the coded representation of the characters;

b) specifies a repertoire of the Latin alphabetic and non-alphabetic characters for the communication of text in many European languages using the Latin script;

c) specifies rules for the definitions and use of graphic character subrepertoires, i.e. subsets of the specified character repertoire.

2 Conformance and implementation

2.1 Conformance

2.1.1 Conformance of information interchange

A coded-character-data-element (CC-data-element) within coded information for interchange is in conformance with this International Standard if all coded representations of characters within that CC-data-element conform to the mandatory requirements of this International Standard.

A claim of conformance shall identify:
- the subrepertoire in accordance with clause 9, if one has been adopted,
- the 7-bit coding in accordance with Annex A, if it has been adopted.

2.1.2 Conformance of devices

A device is in conformance with this International Standard if it conforms to the requirements of 2.1.2.1 and either or both 2.1.2.2 and 2.1.2.3 below.

2.1.2.1 Device description

A device that conforms to this International Standard shall be the subject of a description that identifies the means by which the user may supply characters to the device, or may recognize them when they are made available to the user, as specified respectively in 2.1.2.2 and 2.1.2.3 below.

2.1.2.2 Originating devices

An originating device shall allow its user to supply any sequence of characters of the character repertoire, and shall be capable of transmitting their coded representations within a CC-data-element.

2.1.2.3 Receiving devices

A receiving device shall be capable of receiving and interpreting any coded representation of characters that are within a CC-data-element, and that conform to 2.1.1 of this International Standard, and shall make the corresponding characters available to its user in such a way that the user can identify them among those of the repertoire, and can distinguish them from each other.

2.2 Implementation

The use of this character set requires definitions of its implementation in various media. For example, these could include magnetic and optical interchangeable media and transmission channels, thus permitting interchange of data to take place either indirectly by means of an intermediate recording on a physical medium, or by local connection of various units (such as input and output devices and computers) or by means of data transmission equipment.

The implementation of this coded character set in physical media and for transmission, taking into account the need for error checking, may be the subject of other International Standards.

3 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All Standards are subject to revision, and parties to agreements based on this International Standard 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/IEC 2022:1994, *Information technology - Character code structure and extension techniques*.

ISO/IEC 7350:1991, *Information technology - Registration of repertoires of the graphic characters from ISO/IEC 10367*.

ISO/IEC 10367:1991, *Information technology - Standardized coded graphic character sets for use in 8-bit codes.*

ISO/IEC 10538:1991, *Information technology - Control functions for text communication*.

ISO/IEC 10646:1998, *Information technology - Universal Multiple-Octet Coded Character Set (UCS) - Part 1: Architecture and Basic Multilingual Plane (BMP)* (including AMD 1-9 and COR 1).

4 Definitions

For the purposes of this International Standard, the following definitions apply:

4.1 active position: The character position which is to image the graphic symbol representing the next graphic character or relative to which the next control function is to be executed.

4.2 bit combination: An ordered set of bits used for the representation of characters.

4.3 character: A member of a set of elements used for the organization, control or representation of data.

4.4 character position: The portion of a display that is imaging or is capable of imaging a graphic symbol.

4.5 coded-character-data-element (CC-data-element): An element of interchanged information that is specified to consist of a sequence of coded representations of characters, in accordance with one or more identified standards for coded character sets.

NOTE 1 In a communication environment in accordance with the Reference Model for Open Systems Interconnection of ISO 7498, a CC-data-element will form all or part of the information that corresponds to the Presentation-Protocol-Data-Unit (PPDU) defined in that International Standard.

NOTE 2 When information interchange is accomplished by means of interchangeable media, a CC-data-element will form all or part of the information that corresponds to the user data, and not that recorded during formatting and initialization.

4.6 coded character set; code: 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.

4.7 code extension: The techniques for the encoding of characters that are not included in the character set of a given code.

4.8 code table: A table showing the character allocated to each bit combination in a code.

4.9 control character: A control function the coded representation of which consists of a single bit combination.

4.10 control function: An element of a character set that affects the recording, processing, transmission or interpretation of data, and that has a coded representation consisting of one or more bit combinations.

4.11 device: A component of information processing equipment which can transmit, and/or receive, coded information within CC-data-elements.

NOTE 3 It may be an input/output device in the conventional sense, or a process such as an application program or gateway function.

4.12 escape sequence: A string of bit combinations that are used for control purposes in code extension procedures. The first of these bit combinations represents the control function ESCAPE.

NOTE 4 Formats and rules regarding the use of escape sequences are specified in ISO/IEC 2022.

4.13 graphic character: A character, other than a control function, that has a visual representation normally handwritten, printed or displayed, and that has a coded representation consisting of one or more bit combinations.

4.14 graphic symbol: A visual representation of a graphic character or of a control function.

4.15 repertoire: A specified set of characters that are represented by one or more bit combinations of a coded character set.

4.16 text: A representation of information for human comprehension that is intended for presentation in a two-dimensional form, for example printed on paper or displayed on a screen.

Text consists of symbols, phrases or sentences in natural or artificial languages, pictures, diagrams and tables.

NOTE 5 This International Standard applies only to text made up of characters.

4.17 text communication; communication of text: The transfer of text by means of telecommunications.

NOTE 6 In the context of this International Standard, text communication is by means of binary-coded representations of characters.

4.18 user: A person or other entity that invokes the services provided by a device.

NOTE 7 This entity may be a process such as an application program if the "device" is a code convertor or a gateway function, for example.

NOTE 8 The characters, as supplied by the user or made available to the user, may be in the form of codes local to the device, or of non-conventional visible representations, provided that 2.1.2 above is satisfied.

5 Notation, code table and names

5.1 Notation

The bits of the bit combinations of the 8-bit code are identified by b_8, b_7, b_6, b_5, b_4, b_3, b_2 and b_1, where b_8 is the highest-order, or most significant bit and b_1 is the lowest-order, or least significant bit.
The bit combinations may be interpreted to represent numbers in the range 0 to 255 in binary notation by attributing the following weights to the individual bits:

Bit	b_8	b_7	b_6	b_5	b_4	b_3	b_2	b_1
Weight	128	64	32	16	8	4	2	1

In this International Standard, the bit combinations are identified by notations of the form xx/yy, where xx and yy are numbers in the range 00 to 15. The correspondence between the notations of the form xx/yy and the bit combinations consisting of the bits b_8 to b_1, is as follows:

- xx is the number represented by b_8, b_7, b_6 and b_5 where these bits are given the weights 8, 4, 2 and 1, respectively;

- yy is the number represented by b_4, b_3, b_2 and b_1 where these bits are given the weights 8, 4, 2 and 1, respectively.

The notations of the form xx/yy are the same as the ones used to identify code table positions, where xx is the column number and yy is the row number (see 5.2).

5.2 Code table

An 8-bit code table consists of 256 positions arranged in 16 columns and 16 rows. The columns and rows are numbered 00 to 15.

The code table positions are identified by notations of the form xx/yy, where xx is the column number and yy is the row number.

The positions of the code table are in one-to-one correspondence with the bit combinations of the code. The notation of a code table position, of the form xx/yy, is the same as that of the corresponding bit combination.

5.3 Names

This International Standard assigns one name to each character. In addition, it specifies an acronym for the three characters SPACE, NO-BREAK SPACE and SOFT HYPHEN and a graphic symbol for the other graphic characters. By convention, only capital letters, space and hyphen are used for writing the names of characters. It is intended that the acronym and this convention be retained in all translations of the text of this International Standard.

The names chosen to denote graphic characters are intended to reflect their customary meaning. However, this International Standard does not define and does not restrict the meanings of graphic characters. Neither does it specify a particular style or font design for imaging the graphic characters.

6 Specifications of SPACE, NO-BREAK SPACE and SOFT HYPHEN

6.1 SPACE (SP): A graphic character that has a visual representation consisting of the absence of a graphic symbol. Its coded representation is 02/00.

6.2 NO-BREAK SPACE (NBSP): A graphic character, the visual representation of which consists of the absence of a graphic symbol, for use when a line break is to be prevented in the text as presented.

6.3 SOFT HYPHEN (SHY): A graphic character that is imaged by a graphic symbol identical with, or similar to, that representing HYPHEN-MINUS, for use when a line break has been established within a word.

7 Composition of the character repertoire

The repertoire of the graphic characters defined in this International Standard consists of

a) SPACE (SP)

and of 332 characters as follows

b) Latin alphabetic characters comprising

1) the 52 capital and small letters of the basic Latin alphabet,

2) accented letters, the graphic representations of which consist of combinations of basic Latin letters with diacritical marks,

3) special alphabetic characters which are neither basic Latin letters nor combinations of basic Latin letters with diacritical marks;

c) non-alphabetic characters, such as digits, fractions, punctuation and diacritical marks, monetary symbols etc.

The repertoire, excluding SPACE, is specified in table 4. In each table entry, the first column specifies the name of the character. The second column specifies its coded representation (see 8.3).

NOTE 9 A survey of the use of Latin characters in various languages is included in Annex D.

NOTE 10 Use of the following characters: LATIN CAPITAL LETTER L WITH MIDDLE DOT, LATIN SMALL LETTER L WITH MIDDLE DOT and LATIN SMALL LETTER N PRECEDED BY APOSTROPHE, is deprecated.

8 Specification of the coded character set

8.1 Character sets

The coded representations of the graphic characters of the repertoire defined in this International Standard make use of the character SPACE and of two character sets, that is "a primary set" and a "supplementary set".

The primary set shall consist of the graphic characters of the basic G0 set of ISO/IEC 10367, represented by bit combinations 02/01 to 07/14. The characters of the primary set shall not be used in combination with each other to generate graphic characters of the repertoire defined in this International Standard. The primary set contains the letters of the basic Latin alphabet, some spacing diacritical marks and a number of non-alphabetic characters.

The supplementary set contains graphic characters, represented by bit combinations 10/00 to 11/15 and 13/00 to 15/15, and non-spacing diacritical marks, represented by bit combinations 12/00 to 12/15. The graphic characters consist of a number of characters used in addition to those in the primary set.

A non-spacing diacritical mark shall be used only in combination with certain basic Latin letters, or with SPACE. The allowed combinations of non-spacing diacritical marks and letters are the ones needed to represent the accented letters included in table 4. This set of combinations is summarized in Annex C.

The code table for the primary and the supplementary sets of graphic characters is given in table 1. Shaded positions denote bit combinations which shall not be used.

The names of the characters in the primary set are specified in Table 2.

The names of the characters and non-spacing diacritical marks of the supplementary set are specified in Table 3. In order to stress that non-spacing diacritical marks are not characters, the names given to them are printed in lower case italics.

8.2 Explanations concerning the code table

8.2.1 Bit combinations 10/04 and 10/06 are reserved for future standardization, and shall not be used.

8.2.2 The non-spacing diacritical marks of column 12 are used only in combination with certain basic Latin letters, or with SPACE (see Annex C). The graphic symbols shown in coloumn 12 represent diacritical marks as separate graphic characters.

8.2.3 Bit combinations 12/00, 12/09 and 12/12 are reserved for possible allocation of additional diacritical marks, and shall not be used.

8.2.4 Bit combinations 13/08 to 13/11 and 14/05 are reserved for future standardization, and shall not be used.

8.3 Coded representations of the graphic characters of the repertoire

The coded representations of the graphic characters of the repertoire defined in this International Standard are specified in table 4. The formats of the coded representations are as follows:

a) Accented letters

Each accented letter is represented by a sequence of bit combinations consisting of the coded representation of the relevant non-spacing diacritical mark (an element of the supplementary set), followed by the coded representation of the relevant basic Latin letter (an element of the primary set).

b) Diacritical marks as separate graphic characters

The diacritical marks that are elements of the primary set (GRAVE ACCENT, CIRCUMFLEX ACCENT and TILDE) are represented as separate graphic characters by the corresponding single bit combination in the range 02/01 to 07/14.

The other ten of the diacritical marks of column 12 are represented as separate graphic characters by a sequence of bit combinations consisting of the coded representation of the relevant non-spacing diacritical mark (an element of the supplementary set), followed by the coded representation of the character SPACE, i.e. the bit combination 02/00.

c) All other graphic characters of the repertoire

Any graphic character of the repertoire, other than an accented letter or a diacritical mark as a separate graphic character that is not an element of the primary set, is an element of either the primary set or the supplementary set and is represented by the corresponding single bit combination in the range 02/01 to 07/14 or 10/00 to 15/15.

Depending of the code extension techniques used, a bit combination, representing an element of either the primary or the supplementary set may have to be preceded by a code extension function invoking the character set concerned.

NOTES Explanations concerning certain letters:

NOTE 11 Accented letter LATIN SMALL LETTER G WITH CEDILLA was named "small g with acute accent" in the 1983 edition of this International Standard. For compatibility purposes, the coded representation has been kept unchanged. The name has been aligned with that in ISO/IEC 10646-1. The cedilla, upturned, is placed above "g" for presentation purposes.

NOTE 12 There is no LATIN CAPITAL LETTER ETH in this International Standard. There is a letter named LATIN CAPITAL LETTER D WITH STROKE which will also serve as the capital form of Icelandic Eth, where this International Standard is used. It should be noted that ISO/IEC 10646, ISO/IEC 8859-1 and ISO/IEC 10367 provide for a LATIN CAPITAL LETTER ETH as well as a LATIN CAPITAL LETTER D WITH STROKE.

9 Graphic character subrepertoires

The purpose of defining character subrepertoires is to facilitate communication with equipment capable of presenting text using a limited set of graphic characters at one time. An example of equipment that might make use of subrepertoires is a text communication terminal containing an output device that has a changeable printing element (physical or other). However, in order to comply with the requirements of this International Standard, such a text communication terminal has to be capable of receiving and presenting all graphic characters of the repertoire in some manner, possibly using one or more alternative printing elements.

Subrepertoires are defined in accordance with the following rules:

a) A subrepertoire shall include the character SPACE, the 26 Latin unaccented small letters and the 26 Latin unaccented capital letters.

b) A subrepertoire shall include the 10 digits.

c) A subrepertoire shall include the following characters:

Graphic symbol	Name
'	APOSTROPHE
(	LEFT PARENTHESIS
)	RIGHT PARENTHESIS
,	COMMA
-	HYPHEN-MINUS
.	FULL STOP
/	SOLIDUS
:	COLON
?	QUESTION MARK
+	PLUS SIGN
=	EQUALS SIGN

d) A subrepertoire may include any other graphic characters of the repertoire defined in this International Standard.

e) A subrepertoire shall not include any character not defined in this International Standard.

f) Two or more graphic characters of the repertoire shall not be included as a single character in the subrepertoire.

The procedure for registration of subrepertoires is specified in ISO/IEC 7350.

The identifier assigned to a registered subrepertoire is intended to be used as a parameter value of the control function IDENTIFY GRAPHIC SUBREPERTOIRE (IGS) which is defined in ISO/IEC 10538.

10 Identification of options

10.1 Purpose and context of identification

CC-data-elements conforming to an option of this International Standard are intended to form all or part of a composite unit of coded information that is interchanged between a sender and a recipient. The identification of the options of this International Standard that have been adopted by the originator shall also be available to the recipient. The route by which such identification is communicated to the recipient is outside the scope of this International Standard.

However, some standards for interchange of coded information may permit, or require, that the coded representation of the identification applicable to the CC-data-elements forms part of the interchanged information. This clause specifies a coded representation for the identification of options of this International Standard. Such coded representations form all or part of an identifying data element, which may be included in information interchange in accordance with the relevant standard.

10.2 Identification of coding method

The coding method adopted shall be identified by means of one of the following announcer sequences:

ESC 02/00 04/10 shall identify 7-bit coding (as in Annex A);

ESC 02/00 04/11 shall identify 8-bit coding.

10.3 Identification of primary and supplementary sets

The escape sequences used to designate the primary and the supplementary sets are:

ESC 02/08 04/02	:	to designate the primary set of the present edition of this International Standard as the G0 set (ISO-IR 6);
ESC 02/13 05/02	:	to designate the supplementary set of the present edition of this International Standard as the G1 set (ISO-IR 156);
ESC 02/14 05/02	:	to designate the supplementary set of the present edition of this International Standard as the G2 set;
ESC 02/15 05/02	:	to designate the supplementary set of the present edition of this International Standard as the G3 set.

NOTE 13 The escape sequences used to designate the primary and the supplementary sets of ISO 6937/2:1983 are:

ESC 02/08 04/00	:	to designate the primary set as the G0 set (ISO–IR 2);
ESC 02/09 06/12	:	to designate the supplementary set as the G1 set (ISO-IR 90);
ESC 02/10 06/12	:	to designate the supplementary set as the G2 set;
ESC 02/11 06/12	:	to designate the supplementary set as the G3 set.

10.4 Identification of subrepertoire

The subrepertoire adopted shall be identified by the control function IDENTIFY GRAPHIC SUBREPERTOIRE (IGS) which is defined in ISO/IEC 10538. Parameter values identifying graphic character subrepertoires are registered in accordance with ISO/IEC 7350.

Table 1 - Primary and supplementary sets of graphic characters and non-spacing diacritical marks for text communication (coding when represented by bit combinations 02/01 to 07/14 and 10/00 to 15/15 of an 8-bit code)

	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
00				0	@	P	`	p			NBSP	°		―	Ω	ĸ
01			!	1	A	Q	a	q			¡	±	`	¹	Æ	æ
02			"	2	B	R	b	r			¢	²	´	®	Đ	đ
03			#	3	C	S	c	s			£	³	^	©	ª	ð
04			$	4	D	T	d	t				×	~	™	Ħ	ħ
05			%	5	E	U	e	u			¥	µ	¯	♪		ı
06			&	6	F	V	f	v				¶	˘	¬	Ĳ	ĳ
07			’	7	G	W	g	w			§	·	˙	|	Ŀ	ŀ
08			(	8	H	X	h	x			¤	÷	¨		Ł	ł
09			)	9	I	Y	i	y			‘	’			Ø	ø
10			*	:	J	Z	j	x			“	”	˚		Œ	œ
11			+	;	K	[	k	{			«	»	¸		º	ß
12			,	<	L	\	l	|			←	¼		⅛	Þ	þ
13			-	=	M	]	m	}			↑	½	˝	⅜	Ŧ	ŧ
14			.	>	N	^	n	~			→	¾	˛	⅝	Ŋ	ŋ
15			/	?	O	_	o				↓	¿	ˇ	⅞	ŉ	SHY

Table 2 - Specification of the primary character set in an 8-bit code

Bit comb.	Name	Bit comb.	Name
		05/00	LATIN CAPITAL LETTER P
02/01	EXCLAMATION MARK	05/01	LATIN CAPITAL LETTER Q
02/02	QUOTATION MARK	05/02	LATIN CAPITAL LETTER R
02/03	NUMBER SIGN	05/03	LATIN CAPITAL LETTER S
02/04	DOLLAR SIGN	05/04	LATIN CAPITAL LETTER T
02/05	PERCENT SIGN	05/05	LATIN CAPITAL LETTER U
02/06	AMPERSAND	05/06	LATIN CAPITAL LETTER V
02/07	APOSTROPHE	05/07	LATIN CAPITAL LETTER W
02/08	LEFT PARENTHESIS	05/08	LATIN CAPITAL LETTER X
02/09	RIGHT PARENTHESIS	05/09	LATIN CAPITAL LETTER Y
02/10	ASTERISK	05/10	LATIN CAPITAL LETTER Z
02/11	PLUS SIGN	05/11	LEFT SQUARE BRACKET
02/12	COMMA	05/12	REVERSE SOLIDUS
02/13	HYPHEN–MINUS	05/13	RIGHT SQUARE BRACKET
02/14	FULL STOP	05/14	CIRCUMFLEX ACCENT
02/15	SOLIDUS	05/15	LOW LINE
03/00	DIGIT ZERO	06/00	GRAVE ACCENT
03/01	DIGIT ONE	06/01	LATIN SMALL LETTER A
03/02	DIGIT TWO	06/02	LATIN SMALL LETTER B
03/03	DIGIT THREE	06/03	LATIN SMALL LETTER C
03/04	DIGIT FOUR	06/04	LATIN SMALL LETTER D
03/05	DIGIT FIVE	06/05	LATIN SMALL LETTER E
03/06	DIGIT SIX	06/06	LATIN SMALL LETTER F
03/07	DIGIT SEVEN	06/07	LATIN SMALL LETTER G
03/08	DIGIT EIGHT	06/08	LATIN SMALL LETTER H
03/09	DIGIT NINE	06/09	LATIN SMALL LETTER I
03/10	COLON	06/10	LATIN SMALL LETTER J
03/11	SEMICOLON	06/11	LATIN SMALL LETTER K
03/12	LESS–THAN SIGN	06/12	LATIN SMALL LETTER L
03/13	EQUALS SIGN	06/13	LATIN SMALL LETTER M
03/14	GREATER–THAN SIGN	06/14	LATIN SMALL LETTER N
03/15	QUESTION MARK	06/15	LATIN SMALL LETTER O
04/00	COMMERCIAL AT	07/00	LATIN SMALL LETTER P
04/01	LATIN CAPITAL LETTER A	07/01	LATIN SMALL LETTER Q
04/02	LATIN CAPITAL LETTER B	07/02	LATIN SMALL LETTER R
04/03	LATIN CAPITAL LETTER C	07/03	LATIN SMALL LETTER S
04/04	LATIN CAPITAL LETTER D	07/04	LATIN SMALL LETTER T
04/05	LATIN CAPITAL LETTER E	07/05	LATIN SMALL LETTER U
04/06	LATIN CAPITAL LETTER F	07/06	LATIN SMALL LETTER V
04/07	LATIN CAPITAL LETTER G	07/07	LATIN SMALL LETTER W
04/08	LATIN CAPITAL LETTER H	07/08	LATIN SMALL LETTER X
04/09	LATIN CAPITAL LETTER I	07/09	LATIN SMALL LETTER Y
04/10	LATIN CAPITAL LETTER J	07/10	LATIN SMALL LETTER Z
04/11	LATIN CAPITAL LETTER K	07/11	LEFT CURLY BRACKET
04/12	LATIN CAPITAL LETTER L	07/12	VERTICAL LINE
04/13	LATIN CAPITAL LETTER M	07/13	RIGHT CURLY BRACKET
04/14	LATIN CAPITAL LETTER N	07/14	TILDE
04/15	LATIN CAPITAL LETTER O		

Table 3 - Specification of the supplementary character set in an 8-bit code

Bit comb.	Name	Bit comb.	Name
10/00	NO-BREAK SPACE	13/00	HORIZONTAL BAR
10/01	INVERTED EXCLAMATION MARK	13/01	SUPERSCRIPT ONE
10/02	CENT SIGN	13/02	REGISTERED SIGN
10/03	POUND SIGN	13/03	COPYRIGHT SIGN
10/04	(This position shall not be used)	13/04	TRADE MARK SIGN
10/05	YEN SIGN	13/05	EIGHTH NOTE
10/06	(This position shall not be used)	13/06	NOT SIGN
10/07	SECTION SIGN	13/07	BROKEN BAR
10/08	CURRENCY SIGN	13/08	(This position shall not be used)
10/09	LEFT SINGLE QUOTATION MARK	13/09	(This position shall not be used)
10/10	LEFT DOUBLE QUOTATION MARK	13/10	(This position shall not be used)
10/11	LEFT-POINTING DOUBLE ANGLE QUOTATION MARK	13/11	(This position shall not be used)
10/12	LEFTWARDS ARROW	13/12	VULGAR FRACTION ONE EIGHTH
10/13	UPWARDS ARROW	13/13	VULGAR FRACTION THREE EIGHTHS
10/14	RIGHTWARDS ARROW	13/14	VULGAR FRACTION FIVE EIGHTHS
10/15	DOWNWARDS ARROW	13/15	VULGAR FRACTION SEVEN EIGHTHS
11/00	DEGREE SIGN	14/00	OHM SIGN
11/01	PLUS-MINUS SIGN	14/01	LATIN CAPITAL LETTER AE
11/02	SUPERSCRIPT TWO	14/02	LATIN CAPITAL LETTER D WITH STROKE
11/03	SUPERSCRIPT THREE	14/03	FEMININE ORDINAL INDICATOR
11/04	MULTIPLICATION SIGN	14/04	LATIN CAPITAL LETTER H WITH STROKE
11/05	MICRO SIGN	14/05	(This position shall not be used)
11/06	PILCROW SIGN	14/06	LATIN CAPITAL LIGATURE IJ
11/07	MIDDLE DOT	14/07	LATIN CAPITAL LETTER L WITH MIDDLE DOT
11/08	DIVISION SIGN	14/08	LATIN CAPITAL LETTER L WITH STROKE
11/09	RIGHT SINGLE QUOTATION MARK	14/09	LATIN CAPITAL LETTER O WITH STROKE
11/10	RIGHT DOUBLE QUOTATION MARK	14/10	LATIN CAPITAL LIGATURE OE
11/11	RIGHT-POINTING DOUBLE ANGLE QUOTATION MARK	14/11	MASCULINE ORDINAL INDICATOR
11/12	VULGAR FRACTION ONE QUARTER	14/12	LATIN CAPITAL LETTER THORN
11/13	VULGAR FRACTION ONE HALF	14/13	LATIN CAPITAL LETTER T WITH STROKE
11/14	VULGAR FRACTION THREE QUARTERS	14/14	LATIN CAPITAL LETTER ENG
11/15	INVERTED QUESTION MARK	14/15	LATIN SMALL LETTER N PRECEDED BY APOSTROPHE
12/00	(This position shall not be used)	15/00	LATIN SMALL LETTER KRA
12/01	*non-spacing grave accent*	15/01	LATIN SMALL LETTER AE
12/02	*non-spacing grave accent*	15/02	LATIN SMALL LETTER D WITH STROKE
12/03	*non-spacing circumflex accent*	15/03	LATIN SMALL LETTER ETH
12/04	*non-spacing tilde*	15/04	LATIN SMALL LETTER H WITH STROKE
12/05	*non-spacing macron*	15/05	LATIN SMALL LETTER DOTLESS I
12/06	*non-spacing breve*	15/06	LATIN SMALL LIGATURE IJ
12/07	*non-spacing dot above*	15/07	LATIN SMALL LETTER L WITH MIDDLE DOT
12/08	*non-spacing diaeresis*	15/08	LATIN SMALL LETTER L WITH STROKE
12/09	(This position shall not be used)	15/09	LATIN SMALL LETTER O WITH STROKE
12/10	*non-spacing ring above*	15/10	LATIN SMALL LIGATURE OE
12/11	*non-spacing cedilla*	15/11	LATIN SMALL LETTER SHARP S
12/12	(This position shall not be used)	15/12	LATIN SMALL LETTER THORN
12/13	*non-spacing double acute accent*	15/13	LATIN SMALL LETTER T WITH STROKE
12/14	*non-spacing ogonek*	15/14	LATIN SMALL LETTER ENG
12/15	*non-spacing caron*	15/15	SOFT HYPHEN

Table 4 - Specification of the repertoire

Name	Coded representation	
ACUTE ACCENT	12/02	02/00
AMPERSAND		02/06
APOSTROPHE		02/07
ASTERISK		02/10
BREVE	12/06	02/00
BROKEN BAR	13/07	
CARON	12/15	02/00
CEDILLA	12/11	02/00
CENT SIGN	10/02	
CIRCUMFLEX ACCENT		05/14
COLON		03/10
COMMA		02/12
COMMERCIAL AT		04/00
COPYRIGHT SIGN	13/03	
CURRENCY SIGN	10/08	
DEGREE SIGN	11/00	
DIAERESIS	12/08	02/00
DIGIT EIGHT		03/08
DIGIT FIVE		03/05
DIGIT FOUR		03/04
DIGIT NINE		03/09
DIGIT ONE		03/01
DIGIT SEVEN		03/07
DIGIT SIX		03/06
DIGIT THREE		03/03
DIGIT TWO		03/02
DIGIT ZERO		03/00
DIVISION SIGN	11/08	
DOLLAR SIGN		02/04
DOT ABOVE	12/07	02/00
DOUBLE ACUTE ACCENT	12/13	02/00
DOWNWARDS ARROW	10/15	
EQUALS SIGN		03/13
EXCLAMATION MARK		02/01
FEMININE ORDINAL INDICATOR	14/03	
FULL STOP		02/14
GRAVE ACCENT		06/00
GREATER-THAN SIGN		03/14
HORIZONTAL BAR	13/00	
HYPHEN-MINUS		02/13
INVERTED EXCLAMATION MARK	10/01	
INVERTED QUESTION MARK	11/15	
LATIN CAPITAL LETTER A		04/01
LATIN CAPITAL LETTER A WITH ACUTE	12/02	04/01
LATIN CAPITAL LETTER A WITH BREVE	12/06	04/01
LATIN CAPITAL LETTER A WITH CIRCUMFLEX	12/03	04/01
LATIN CAPITAL LETTER A WITH DIAERESIS	12/08	04/01
LATIN CAPITAL LETTER A WITH GRAVE	12/01	04/01
LATIN CAPITAL LETTER A WITH MACRON	12/05	04/01
LATIN CAPITAL LETTER A WITH OGONEK	12/14	04/01
LATIN CAPITAL LETTER A WITH RING ABOVE	12/10	04/01

Table 4 - *(continued)*

Name	Coded representation	
LATIN CAPITAL LETTER A WITH TILDE	12/04	04/01
LATIN CAPITAL LETTER AE[1]	14/01	
LATIN CAPITAL LETTER B		04/02
LATIN CAPITAL LETTER C		04/03
LATIN CAPITAL LETTER C WITH ACUTE	12/02	04/03
LATIN CAPITAL LETTER C WITH CARON	12/15	04/03
LATIN CAPITAL LETTER C WITH CEDILLA	12/11	04/03
LATIN CAPITAL LETTER C WITH CIRCUMFLEX	12/03	04/03
LATIN CAPITAL LETTER C WITH DOT ABOVE	12/07	04/03
LATIN CAPITAL LETTER D		04/04
LATIN CAPITAL LETTER D WITH CARON	12/15	04/04
LATIN CAPITAL LETTER D WITH STROKE	14/02	
LATIN CAPITAL LETTER E		04/05
LATIN CAPITAL LETTER E WITH ACUTE	12/02	04/05
LATIN CAPITAL LETTER E WITH CARON	12/15	04/05
LATIN CAPITAL LETTER E WITH CIRCUMFLEX	12/03	04/05
LATIN CAPITAL LETTER E WITH DIAERESIS	12/08	04/05
LATIN CAPITAL LETTER E WITH DOT ABOVE	12/07	04/05
LATIN CAPITAL LETTER E WITH GRAVE	12/01	04/05
LATIN CAPITAL LETTER E WITH MACRON	12/05	04/05
LATIN CAPITAL LETTER E WITH OGONEK	12/14	04/05
LATIN CAPITAL LETTER ENG	14/14	
LATIN CAPITAL LETTER F		04/06
LATIN CAPITAL LETTER G		04/07
LATIN CAPITAL LETTER G WITH BREVE	12/06	04/07
LATIN CAPITAL LETTER G WITH CEDILLA	12/11	04/07
LATIN CAPITAL LETTER G WITH CIRCUMFLEX	12/03	04/07
LATIN CAPITAL LETTER G WITH DOT ABOVE	12/07	04/07
LATIN CAPITAL LETTER H		04/08
LATIN CAPITAL LETTER H WITH CIRCUMFLEX	12/03	04/08
LATIN CAPITAL LETTER H WITH STROKE	14/04	
LATIN CAPITAL LETTER I		04/09
LATIN CAPITAL LETTER I WITH ACUTE	12/02	04/09
LATIN CAPITAL LETTER I WITH CIRCUMFLEX	12/03	04/09
LATIN CAPITAL LETTER I WITH DIAERESIS	12/08	04/09
LATIN CAPITAL LETTER I WITH DOT ABOVE	12/07	04/09
LATIN CAPITAL LETTER I WITH GRAVE	12/01	04/09
LATIN CAPITAL LETTER I WITH MACRON	12/05	04/09
LATIN CAPITAL LETTER I WITH OGONEK	12/14	04/09
LATIN CAPITAL LETTER I WITH TILDE	12/04	04/09
LATIN CAPITAL LETTER J		04/10
LATIN CAPITAL LETTER J WITH CIRCUMFLEX	12/03	04/10
LATIN CAPITAL LETTER K		04/11
LATIN CAPITAL LETTER K WITH CEDILLA	12/11	04/11
LATIN CAPITAL LETTER L		04/12
LATIN CAPITAL LETTER L WITH ACUTE	12/02	04/12
LATIN CAPITAL LETTER L WITH CARON	12/15	04/12
LATIN CAPITAL LETTER L WITH CEDILLA	12/11	04/12
LATIN CAPITAL LETTER L WITH MIDDLE DOT	14/07	
LATIN CAPITAL LETTER L WITH STROKE	14/08	
LATIN CAPITAL LETTER M		04/13

NOTE 1 This letter was named LATIN CAPITAL LIGATURE A E in the 1994 edition of this International Standard. The name has been aligned with that in ISO/IEC 10646-1.

Table 4 - *(continued)*

Name	Coded representation	
LATIN CAPITAL LETTER N		04/14
LATIN CAPITAL LETTER N WITH ACUTE	12/02	04/14
LATIN CAPITAL LETTER N WITH CARON	12/15	04/14
LATIN CAPITAL LETTER N WITH CEDILLA	12/11	04/14
LATIN CAPITAL LETTER N WITH TILDE	12/04	04/14
LATIN CAPITAL LETTER O		04/15
LATIN CAPITAL LETTER O WITH ACUTE	12/02	04/15
LATIN CAPITAL LETTER O WITH CIRCUMFLEX	12/03	04/15
LATIN CAPITAL LETTER O WITH DIAERESIS	12/08	04/15
LATIN CAPITAL LETTER O WITH DOUBLE ACUTE	12/13	04/15
LATIN CAPITAL LETTER O WITH GRAVE	12/01	04/15
LATIN CAPITAL LETTER O WITH MACRON	12/05	04/15
LATIN CAPITAL LETTER O WITH STROKE	14/09	
LATIN CAPITAL LETTER O WITH TILDE	12/04	04/15
LATIN CAPITAL LETTER P		05/00
LATIN CAPITAL LETTER Q		05/01
LATIN CAPITAL LETTER R		05/02
LATIN CAPITAL LETTER R WITH ACUTE	12/02	05/02
LATIN CAPITAL LETTER R WITH CARON	12/15	05/02
LATIN CAPITAL LETTER R WITH CEDILLA	12/11	05/02
LATIN CAPITAL LETTER S		05/03
LATIN CAPITAL LETTER S WITH ACUTE	12/02	05/03
LATIN CAPITAL LETTER S WITH CARON	12/15	05/03
LATIN CAPITAL LETTER S WITH CEDILLA	12/11	05/03
LATIN CAPITAL LETTER S WITH CIRCUMFLEX	12/03	05/03
LATIN CAPITAL LETTER T		05/04
LATIN CAPITAL LETTER T WITH CARON	12/15	05/04
LATIN CAPITAL LETTER T WITH CEDILLA	12/11	05/04
LATIN CAPITAL LETTER T WITH STROKE	14/13	
LATIN CAPITAL LETTER THORN	14/12	
LATIN CAPITAL LETTER U		05/05
LATIN CAPITAL LETTER U WITH ACUTE	12/02	05/05
LATIN CAPITAL LETTER U WITH BREVE	12/06	05/05
LATIN CAPITAL LETTER U WITH CIRCUMFLEX	12/03	05/05
LATIN CAPITAL LETTER U WITH DIAERESIS	12/08	05/05
LATIN CAPITAL LETTER U WITH DOUBLE ACUTE	05/05	12/13
LATIN CAPITAL LETTER U WITH GRAVE	12/01	05/05
LATIN CAPITAL LETTER U WITH MACRON	12/05	05/05
LATIN CAPITAL LETTER U WITH OGONEK	12/14	05/05
LATIN CAPITAL LETTER U WITH RING ABOVE	12/10	05/05
LATIN CAPITAL LETTER U WITH TILDE	12/04	05/05
LATIN CAPITAL LETTER V		05/06
LATIN CAPITAL LETTER W		05/07
LATIN CAPITAL LETTER W WITH CIRCUMFLEX	12/03	05/07
LATIN CAPITAL LETTER X		05/08
LATIN CAPITAL LETTER Y		05/09
LATIN CAPITAL LETTER Y WITH ACUTE	12/02	05/09
LATIN CAPITAL LETTER Y WITH CIRCUMFLEX	12/03	05/09
LATIN CAPITAL LETTER Y WITH DIAERESIS	12/08	05/09
LATIN CAPITAL LETTER Z		05/10

Table 4 - *(continued)*

Name	Coded representation	
LATIN CAPITAL LETTER Z WITH ACUTE	12/02	05/10
LATIN CAPITAL LETTER Z WITH CARON	12/15	05/10
LATIN CAPITAL LETTER Z WITH DOT ABOVE	12/07	05/10
LATIN CAPITAL LIGATURE IJ[2]	14/06	
LATIN CAPITAL LIGATURE OE[2]	14/10	
LATIN SMALL LETTER A		06/01
LATIN SMALL LETTER A WITH ACUTE	12/02	06/01
LATIN SMALL LETTER A WITH BREVE	12/06	06/01
LATIN SMALL LETTER A WITH CIRCUMFLEX	12/03	06/01
LATIN SMALL LETTER A WITH DIAERESIS	12/08	06/01
LATIN SMALL LETTER A WITH GRAVE	12/01	06/01
LATIN SMALL LETTER A WITH MACRON	12/05	06/01
LATIN SMALL LETTER A WITH OGONEK	12/14	06/01
LATIN SMALL LETTER A WITH RING ABOVE	12/10	06/01
LATIN SMALL LETTER A WITH TILDE	12/04	06/01
LATIN SMALL LETTER AE[3]	15/01	
LATIN SMALL LETTER B		06/02
LATIN SMALL LETTER C		06/03
LATIN SMALL LETTER C WITH ACUTE	12/02	06/03
LATIN SMALL LETTER C WITH CARON	12/15	06/03
LATIN SMALL LETTER C WITH CEDILLA	12/11	06/03
LATIN SMALL LETTER C WITH CIRCUMFLEX	12/03	06/03
LATIN SMALL LETTER C WITH DOT ABOVE	12/07	06/03
LATIN SMALL LETTER D		06/04
LATIN SMALL LETTER D WITH CARON	12/15	06/04
LATIN SMALL LETTER D WITH STROKE	15/02	
LATIN SMALL LETTER DOTLESS I	15/05	
LATIN SMALL LETTER E		06/05
LATIN SMALL LETTER E WITH ACUTE	12/02	06/05
LATIN SMALL LETTER E WITH CARON	12/15	06/05
LATIN SMALL LETTER E WITH CIRCUMFLEX	12/03	06/05
LATIN SMALL LETTER E WITH DIAERESIS	12/08	06/05
LATIN SMALL LETTER E WITH DOT ABOVE	12/07	06/05
LATIN SMALL LETTER E WITH GRAVE	12/01	06/05
LATIN SMALL LETTER E WITH MACRON	12/05	06/05
LATIN SMALL LETTER E WITH OGONEK	12/14	06/05
LATIN SMALL LETTER ENG	15/14	
LATIN SMALL LETTER ETH	15/03	
LATIN SMALL LETTER F		06/06
LATIN SMALL LETTER G		06/07
LATIN SMALL LETTER G WITH BREVE	12/06	06/07

NOTE 2 In the Dutch language, LATIN CAPITAL LIGATURE IJ is considered as a letter, and in the French language LATIN CAPITAL LIGATURE OE is considered a letter.

NOTE 3 This letter was named LATIN SMALL LIGATURE A E in the 1994 edition of this International Standard. The name has been aligned with that in ISO/IEC 10646-1.

Table 4 - *(continued)*

Name	Coded representation	
LATIN SMALL LETTER G WITH CEDILLA[4]	12/02	06/07
LATIN SMALL LETTER G WITH CIRCUMFLEX	12/03	06/07
LATIN SMALL LETTER G WITH DOT ABOVE	12/07	06/07
LATIN SMALL LETTER H		06/08
LATIN SMALL LETTER H WITH CIRCUMFLEX	12/03	06/08
LATIN SMALL LETTER H WITH STROKE	15/04	
LATIN SMALL LETTER I		06/09
LATIN SMALL LETTER I WITH ACUTE	12/02	06/09
LATIN SMALL LETTER I WITH CIRCUMFLEX	12/03	06/09
LATIN SMALL LETTER I WITH DIAERESIS	12/08	06/09
LATIN SMALL LETTER I WITH GRAVE	12/01	06/09
LATIN SMALL LETTER I WITH MACRON	12/05	06/09
LATIN SMALL LETTER I WITH OGONEK	12/14	06/09
LATIN SMALL LETTER I WITH TILDE	12/04	06/09
LATIN SMALL LETTER J		06/10
LATIN SMALL LETTER J WITH CIRCUMFLEX	12/03	06/10
LATIN SMALL LETTER K		06/11
LATIN SMALL LETTER K WITH CEDILLA	12/11	06/11
LATIN SMALL LETTER KRA	15/00	
LATIN SMALL LETTER L		06/12
LATIN SMALL LETTER L WITH ACUTE	12/02	06/12
LATIN SMALL LETTER L WITH CARON	12/15	06/12
LATIN SMALL LETTER L WITH CEDILLA	12/11	06/12
LATIN SMALL LETTER L WITH MIDDLE DOT	15/07	
LATIN SMALL LETTER L WITH STROKE	15/08	
LATIN SMALL LETTER M		06/13
LATIN SMALL LETTER N		06/14
LATIN SMALL LETTER N PRECEDED BY APOSTROPHE	14/15	
LATIN SMALL LETTER N WITH ACUTE	12/02	06/14
LATIN SMALL LETTER N WITH CARON	12/15	06/14
LATIN SMALL LETTER N WITH CEDILLA	12/11	06/14
LATIN SMALL LETTER N WITH TILDE	12/04	06/14
LATIN SMALL LETTER O		06/15
LATIN SMALL LETTER O WITH ACUTE	12/02	06/15
LATIN SMALL LETTER O WITH CIRCUMFLEX	12/03	06/15
LATIN SMALL LETTER O WITH DIAERESIS	12/08	06/15
LATIN SMALL LETTER O WITH DOUBLE ACUTE	12/13	06/15
LATIN SMALL LETTER O WITH GRAVE	12/01	06/15
LATIN SMALL LETTER O WITH MACRON	12/05	06/15
LATIN SMALL LETTER O WITH STROKE	15/09	
LATIN SMALL LETTER O WITH TILDE	12/04	06/15
LATIN SMALL LETTER P		07/00
LATIN SMALL LETTER Q		07/01

NOTE 4 Accented letter LATIN SMALL LETTER G WITH CEDILLA was named "small g with acute accent" in the 1983 edition of this International Standard. For compatibility purposes, the coded representation has been kept unchanged. The name has been aligned with that in ISO/IEC 10646-1.

Table 4 - *(continued)*

Name	Coded representation	
LATIN SMALL LETTER R		07/02
LATIN SMALL LETTER R WITH ACUTE	12/02	07/02
LATIN SMALL LETTER R WITH CARON	12/15	07/02
LATIN SMALL LETTER R WITH CEDILLA	12/11	07/02
LATIN SMALL LETTER S		07/03
LATIN SMALL LETTER S WITH ACUTE	12/02	07/03
LATIN SMALL LETTER S WITH CARON	12/15	07/03
LATIN SMALL LETTER S WITH CEDILLA	12/11	07/03
LATIN SMALL LETTER S WITH CIRCUMFLEX	12/03	07/03
LATIN SMALL LETTER SHARP S	15/11	
LATIN SMALL LETTER T		07/04
LATIN SMALL LETTER T WITH CARON	12/15	07/04
LATIN SMALL LETTER T WITH CEDILLA	12/11	07/04
LATIN SMALL LETTER T WITH STROKE	15/13	
LATIN SMALL LETTER THORN	15/12	
LATIN SMALL LETTER U		07/05
LATIN SMALL LETTER U WITH ACUTE	12/02	07/05
LATIN SMALL LETTER U WITH BREVE	12/06	07/05
LATIN SMALL LETTER U WITH CIRCUMFLEX	12/03	07/05
LATIN SMALL LETTER U WITH DIAERESIS	12/08	07/05
LATIN SMALL LETTER U WITH DOUBLE ACUTE	12/13	07/05
LATIN SMALL LETTER U WITH GRAVE	12/01	07/05
LATIN SMALL LETTER U WITH MACRON	12/05	07/05
LATIN SMALL LETTER U WITH OGONEK	12/14	07/05
LATIN SMALL LETTER U WITH RING ABOVE	12/10	07/05
LATIN SMALL LETTER U WITH TILDE	12/04	07/05
LATIN SMALL LETTER V		07/06
LATIN SMALL LETTER W		07/07
LATIN SMALL LETTER W WITH CIRCUMFLEX	12/03	07/07
LATIN SMALL LETTER X		07/08
LATIN SMALL LETTER Y		07/09
LATIN SMALL LETTER Y WITH ACUTE	12/02	07/09
LATIN SMALL LETTER Y WITH CIRCUMFLEX	12/03	07/09
LATIN SMALL LETTER Y WITH DIAERESIS	12/08	07/09
LATIN SMALL LETTER Z		07/10
LATIN SMALL LETTER Z WITH ACUTE	12/02	07/10
LATIN SMALL LETTER Z WITH CARON	12/15	07/10
LATIN SMALL LETTER Z WITH DOT ABOVE	12/07	07/10
LATIN SMALL LIGATURE IJ[5]	15/06	
LATIN SMALL LIGATURE OE[5]	15/10	
LEFT CURLY BRACKET		07/11
LEFT DOUBLE QUOTATION MARK	10/10	

NOTE 5 In the Dutch language, LATIN SMALL LIGATURE IJ is considered as a letter, and in the French language LATIN SMALL LIGATURE OE is considered a letter.

Table 4 - *(concluded)*

Name	Coded representation	
LEFT PARENTHESIS		02/08
LEFT-POINTING DOUBLE ANGLE QUOTATION MARK	10/11	
LEFT SINGLE QUOTATION MARK	10/09	
LEFT SQUARE BRACKET		05/11
LEFTWARDS ARROW	10/12	
LESS-THAN SIGN		03/12
LOW LINE		05/15
MACRON	12/05	02/00
MASCULINE ORDINAL INDICATOR	14/11	
MICRO SIGN	11/05	
MIDDLE DOT	11/07	
MULTIPLICATION SIGN	11/04	
EIGHTH NOTE	13/05	
NO-BREAK SPACE	10/00	
NOT SIGN	13/06	
NUMBER SIGN		02/03
OGONEK	12/14	02/00
OHM SIGN	14/00	
PERCENT SIGN		02/05
PILCROW SIGN	11/06	
PLUS SIGN		02/11
PLUS-MINUS SIGN	11/01	
POUND SIGN	10/03	
QUESTION MARK		03/15
QUOTATION MARK		02/02
REGISTERED SIGN	13/02	
REVERSE SOLIDUS		05/12
RIGHT CURLY BRACKET		07/13
RIGHT DOUBLE QUOTATION MARK	11/10	
RIGHT PARENTHESIS		02/09
RIGHT-POINTING DOUBLE ANGLE QUOTATION MARK	11/11	
RIGHT SINGLE QUOTATION MARK	11/09	
RIGHT SQUARE BRACKET		05/13
RIGHTWARDS ARROW	10/14	
RING ABOVE	12/10	02/00
SECTION SIGN	10/07	
SEMICOLON		03/11
SOFT HYPHEN	15/15	
SOLIDUS		02/15
SPACE	02/00	
SUPERSCRIPT ONE	13/01	
SUPERSCRIPT THREE	11/03	
SUPERSCRIPT TWO	11/02	
TILDE		07/14
TRADE MARK SIGN	13/04	
UPWARDS ARROW	10/13	
VERTICAL LINE		07/12
VULGAR FRACTION FIVE EIGHTHS	13/14	
VULGAR FRACTION ONE EIGHTH	13/12	
VULGAR FRACTION ONE HALF	11/13	
VULGAR FRACTION ONE QUARTER	11/12	
VULGAR FRACTION SEVEN EIGHTHS	13/15	
VULGAR FRACTION THREE EIGHTHS	13/13	
VULGAR FRACTION THREE QUARTERS	11/14	
YEN SIGN	10/05	

Annex A
(normative)

7-bit code

This Annex specifies the 7-bit code for the character sets of this International Standard.

Notation (see 5.1)**:** The bits of the bit combinations of the 7-bit code are identified by b_7, b_6, b_5, b_4, b_3, b_2 and b_1, where b_7 is the highest-order, or most significant bit and b_1 is the lowest-order, or least significant bit.

The bit combinations may be interpreted to represent numbers in the range 0 to 127 in binary notation by attributing the following weights to the individual bits:

Bit	b_7	b_6	b_5	b_4	b_3	b_2	b_1
Weight	64	32	16	8	4	2	1

In this International Standard, the bit combinations are identified by notations of the form xx/yy, where xx is a number in the range 00 to 07 and yy a number in the range 00 to 15. The correspondence between the notations of the form xx/yy and the bit combinations consisting of the bits b_7 to b_1, is as follows:

- xx is the number represented by b_7, b_6 and b_5 where these bits are given the weights 4, 2 and 1, respectively;

- yy is the number represented by b_4, b_3, b_2 and b_1 where these bits are given the weights 8, 4, 2 and 1, respectively.

The notations of the form xx/yy are the same as the ones used to identify code table positions, where xx is the column number and yy is the row number (see 5.2).

Code table (see 5.2)**:** A 7-bit code table consists of 128 positions arranged in 8 columns and 16 rows. The columns are numbered 00 to 07 and the rows are numbered 00 to 15.

G0, G1, G2 and G3 sets: In a 7-bit code, the elements of a G0 set are represented by bit combinations in the range 02/01 to 07/14, and the elements of a G1, G2 or G3 set of graphic characters are also represented by bit combinations in the range 02/00 to 07/15 after invocation by the appropriate code extension function in accordance with ISO 2022.

Table A.1 - Primary set of graphic characters for text communication (coding when represented by bit combinations 02/01 to 07/14 of a 7-bit code)

				b_7	0	0	1	1	1	1
				b_6	1	1	0	0	1	1
				b_5	0	1	0	1	0	1
b_4	b_3	b_2	b_1		**02**	**03**	**04**	**05**	**06**	**07**
0	0	0	0	**00**		0	@	P	‘	p
0	0	0	1	**01**	!	1	A	Q	a	q
0	0	1	0	**02**	"	2	B	R	b	r
0	0	1	1	**03**	#	3	C	S	c	s
0	1	0	0	**04**	$	4	D	T	d	t
0	1	0	1	**05**	%	5	E	U	e	u
0	1	1	0	**06**	&	6	F	V	f	v
0	1	1	1	**07**	’	7	G	W	g	w
1	0	0	0	**08**	(	8	H	X	h	x
1	0	0	1	**09**	)	9	I	Y	i	y
1	0	1	0	**10**	*	:	J	Z	j	z
1	0	1	1	**11**	+	;	K	[	k	{
1	1	0	0	**12**	,	<	L	\	l	|
1	1	0	1	**13**	-	=	M	]	m	}
1	1	1	0	**14**	.	>	N	^	n	~
1	1	1	1	**15**	/	?	O	_	o	

Table A.2 - Supplementary set of graphic characters and non-spacing diacritical marks for text communication (coding when represented by bit combinations 02/00 to 07/15 of a 7-bit code)

				b_7	0	0	1	1	1	1
				b_6	1	1	0	0	1	1
				b_5	0	1	0	1	0	1
b_4	b_3	b_2	b_1		**02**	**03**	**04**	**05**	**06**	**07**
0	0	0	0	**00**	NBSP	°		―	Ω	ĸ
0	0	0	1	**01**	¡	±	`	¹	Æ	æ
0	0	1	0	**02**	¢	²	´	®	Đ	đ
0	0	1	1	**03**	£	³	^	©	ª	ð
0	1	0	0	**04**		×	~	™	Ħ	ħ
0	1	0	1	**05**	¥	µ	¯	♪		ı
0	1	1	0	**06**		¶	˘	¬	Ĳ	ĳ
0	1	1	1	**07**	§	·	˙	¦	Ŀ	ŀ
1	0	0	0	**08**	¤	÷	¨		Ł	ł
1	0	0	1	**09**	‘	’			Ø	ø
1	0	1	0	**10**	“	”	˚		Œ	œ
1	0	1	1	**11**	«	»	¸		º	ß
1	1	0	0	**12**	←	¼		⅛	Þ	þ
1	1	0	1	**13**	↑	½	˝	⅜	Ŧ	ŧ
1	1	1	0	**14**	→	¾	˛	⅝	Ŋ	ŋ
1	1	1	1	**15**	↓	¿	ˇ	⅞	ŉ	SHY

Annex B
(informative)

Method of definition of short identifiers of this International Standard

Characters are identified by their names as specified in the repertoire. In certain applications, these names may be too long for referencing. To serve this situation, a system of short identifiers is introduced.

NOTE 14 In the 1983 edition of this International Standard, these short identifiers were called "identifiers", and intended to identify characters. This practice is not continued in this International Standard, and is in fact deprecated.

For the purpose of this International Standard, a method has been developed which allows for a short form of identification of graphic characters. The method is shown in figure B.1.

Each short identifier consists of two capital letters and two digits.

The first letter indicates an alphabet or a character category (in the case of a non-alphabetic graphic character). Only L, N and S are used in this Annex, the other capital letters are reserved for future use.

The second letter indicates a letter of the alphabet or, in the case of a non-alphabetic graphic character, the group of characters.

In the case of an alphabetic character, the first digit indicates the presence of a diacritical mark or a special form, and the second digit indicates whether it is a capital or a small letter. The digits have no special meaning when the short identifier begins with an N or an S.

The numbering is used in a consistent manner so that each diacritical mark is always given the same number.

The numbering principle is shown in figure B.2.

Table B.1 provides the lists of short identifiers and names for the graphic characters of the repertoire defined in this International Standard.

NOTE 15: The following short identifiers have been changed from the second edition to the third edition:

old	new	character
LA51	LA61	LATIN CAPITAL LETTER AE
LA52	LA62	LATIN SMALL LETTER AE
LG11	LG41	LATIN CAPITAL LETTER G WITH CEDILLA
LI51	LI63	LATIN CAPITAL LIGATURE IJ
LI52	LI64	LATIN SMALL LIGATURE IJ
LO51	LO63	LATIN CAPITAL LIGATURE OE
LO52	LO64	LATIN SMALL LIGATURE OE

and the catogory LIGATURE has been removed from the method of definition of short identifiers.

```
L        A         0              1
|        |         |              |
|        |         |              |
|        |         |              |____________For alphabetic characters:
|        |         |              |             odd digit = small letter;
|        |         |              |             even digit = capital letter.
|        |         |              |
|        |         |              |____________If N or S in first position:
|        |         |                            no special meaning.
|        |         |
|        |         |
|        |         |____________For alphabetic characters:
|        |         |            0 = letter without diacritical mark;
|        |         |            1 to 3 = letter with diacrital mark above it;
|        |         |            4 = letter with diacritical mark below it;
|        |         |            6 = special form.
|        |         |
|        |         |____________If N or S in first position:
|        |                      no special meaning.
|        |
|        |____________ For alphabetic characters:
|        |          A to Z = the respective letter of the Latin alphabet.
|        |
|        |____________ If N in first position:
|        |          D = digit;
|        |          F = fraction;
|        |          S = subscript or superscript.
|        |
|        |____________ If S in first position:
|                   A = arithmetic sign;
|                   C = currency sign;
|                   D = diacritical mark;
|                   P = punctuation mark;
|                   M = other symbol (miscellaneous).
|
|
|________For all graphic characters:
         L = Latin alphabetic character;
         N = numeric graphic character;
         S = special graphic character.
```

Figure B.1 - Method of definition of short identifiers

	Small	Capital
No diacritical mark	01	02
ACUTE ACCENT	11	12
GRAVE ACCENT	13	14
CIRCUMFLEX ACCENT	15	16
DIAERESIS	17	18
TILDE	19	20
CARON	21	22
BREVE	23	24
DOUBLE ACUTE ACCENT	25	26
RING ABOVE	27	28
DOT ABOVE	29	30
MACRON	31	32
CEDILLA	41	42
OGONEK	43	44
Special forms:		
AE, D, H, L, T WITH STROKE	61	62
DOTLESS I	61	-
O WITH STROKE	61	62
KRA	61	-
ENG	61	62
SHARP S	61	-
ETH (see note 12 in clause 8.3)	63	62
L WITH MIDDLE DOT	63	64
N PRECEDED BY APOSTROPHE	63	-
THORN	63	64
IJ, OE	63	64

Figure B.2 - Numbering principle for alphabetic characters

Table B.1 - List of short identifiers for the repertoire in alphabetic order of character names

ID	Name
SD11	ACUTE ACCENT
SM03	AMPERSAND
SP05	APOSTROPHE
SM04	ASTERISK
SD23	BREVE
SM65	BROKEN BAR
SD21	CARON
SD41	CEDILLA
SC04	CENT SIGN
SD15	CIRCUMFLEX ACCENT
SP13	COLON
SP08	COMMA
SM05	COMMERCIAL AT
SM52	COPYRIGHT SIGN
SC01	CURRENCY SIGN
SM19	DEGREE SIGN
SD17	DIAERESIS
ND08	DIGIT EIGHT
ND05	DIGIT FIVE
ND04	DIGIT FOUR
ND09	DIGIT NINE
ND01	DIGIT ONE
ND07	DIGIT SEVEN
ND06	DIGIT SIX
ND03	DIGIT THREE
ND02	DIGIT TWO
ND10	DIGIT ZERO
SA06	DIVISION SIGN
SC03	DOLLAR SIGN
SD29	DOT ABOVE
SD25	DOUBLE ACUTE ACCENT
SM93	EIGHTH NOTE
SM33	DOWNWARDS ARROW
SA04	EQUALS SIGN
SP02	EXCLAMATION MARK
SM21	FEMININE ORDINAL INDICATOR
SP11	FULL STOP
SD13	GRAVE ACCENT
SA05	GREATER-THAN SIGN
SM12	HORIZONTAL BAR
SP10	HYPHEN-MINUS
SP03	INVERTED EXCLAMATION MARK
SP16	INVERTED QUESTION MARK
LA02	LATIN CAPITAL LETTER A
LA12	LATIN CAPITAL LETTER A WITH ACUTE
LA24	LATIN CAPITAL LETTER A WITH BREVE
LA16	LATIN CAPITAL LETTER A WITH CIRCUMFLEX
LA18	LATIN CAPITAL LETTER A WITH DIAERESIS
LA14	LATIN CAPITAL LETTER A WITH GRAVE

Table B.1 - (*continued*)

ID	Name
LA32	LATIN CAPITAL LETTER A WITH MACRON
LA44	LATIN CAPITAL LETTER A WITH OGONEK
LA28	LATIN CAPITAL LETTER A WITH RING ABOVE
LA20	LATIN CAPITAL LETTER A WITH TILDE
LA62	LATIN CAPITAL LETTER AE
LB02	LATIN CAPITAL LETTER B
LC02	LATIN CAPITAL LETTER C
LC12	LATIN CAPITAL LETTER C WITH ACUTE
LC22	LATIN CAPITAL LETTER C WITH CARON
LC42	LATIN CAPITAL LETTER C WITH CEDILLA
LC16	LATIN CAPITAL LETTER C WITH CIRCUMFLEX
LC30	LATIN CAPITAL LETTER C WITH DOT ABOVE
LD02	LATIN CAPITAL LETTER D
LD22	LATIN CAPITAL LETTER D WITH CARON
LD62	LATIN CAPITAL LETTER D WITH STROKE
LE02	LATIN CAPITAL LETTER E
LE12	LATIN CAPITAL LETTER E WITH ACUTE
LE22	LATIN CAPITAL LETTER E WITH CARON
LE16	LATIN CAPITAL LETTER E WITH CIRCUMFLEX
LE18	LATIN CAPITAL LETTER E WITH DIAERESIS
LE30	LATIN CAPITAL LETTER E WITH DOT ABOVE
LE14	LATIN CAPITAL LETTER E WITH GRAVE
LE32	LATIN CAPITAL LETTER E WITH MACRON
LE44	LATIN CAPITAL LETTER E WITH OGONEK
LN62	LATIN CAPITAL LETTER ENG
LF02	LATIN CAPITAL LETTER F
LG02	LATIN CAPITAL LETTER G
LG24	LATIN CAPITAL LETTER G WITH BREVE
LG42	LATIN CAPITAL LETTER G WITH CEDILLA
LG16	LATIN CAPITAL LETTER G WITH CIRCUMFLEX
LG30	LATIN CAPITAL LETTER G WITH DOT ABOVE
LH02	LATIN CAPITAL LETTER H
LH16	LATIN CAPITAL LETTER H WITH CIRCUMFLEX
LH62	LATIN CAPITAL LETTER H WITH STROKE
LI02	LATIN CAPITAL LETTER I
LI12	LATIN CAPITAL LETTER I WITH ACUTE
LI16	LATIN CAPITAL LETTER I WITH CIRCUMFLEX
LI18	LATIN CAPITAL LETTER I WITH DIAERESIS
LI30	LATIN CAPITAL LETTER I WITH DOT ABOVE
LI14	LATIN CAPITAL LETTER I WITH GRAVE
LI32	LATIN CAPITAL LETTER I WITH MACRON
LI44	LATIN CAPITAL LETTER I WITH OGONEK
LI20	LATIN CAPITAL LETTER I WITH TILDE
LJ02	LATIN CAPITAL LETTER J
LJ16	LATIN CAPITAL LETTER J WITH CIRCUMFLEX
LK02	LATIN CAPITAL LETTER K
LK42	LATIN CAPITAL LETTER K WITH CEDILLA
LL02	LATIN CAPITAL LETTER L
LL12	LATIN CAPITAL LETTER L WITH ACUTE

Table B.1 - *(continued)*

ID	Name
LL22	LATIN CAPITAL LETTER L WITH CARON
LL42	LATIN CAPITAL LETTER L WITH CEDILLA
LL64	LATIN CAPITAL LETTER L WITH MIDDLE DOT
LL62	LATIN CAPITAL LETTER L WITH STROKE
LM02	LATIN CAPITAL LETTER M
LN02	LATIN CAPITAL LETTER N
LN12	LATIN CAPITAL LETTER N WITH ACUTE
LN22	LATIN CAPITAL LETTER N WITH CARON
LN42	LATIN CAPITAL LETTER N WITH CEDILLA
LN20	LATIN CAPITAL LETTER N WITH TILDE
LO02	LATIN CAPITAL LETTER O
LO12	LATIN CAPITAL LETTER O WITH ACUTE
LO16	LATIN CAPITAL LETTER O WITH CIRCUMFLEX
LO18	LATIN CAPITAL LETTER O WITH DIAERESIS
LO26	LATIN CAPITAL LETTER O WITH DOUBLE ACUTE
LO14	LATIN CAPITAL LETTER O WITH GRAVE
LO32	LATIN CAPITAL LETTER O WITH MACRON
LO62	LATIN CAPITAL LETTER O WITH STROKE
LO20	LATIN CAPITAL LETTER O WITH TILDE
LP02	LATIN CAPITAL LETTER P
LQ02	LATIN CAPITAL LETTER Q
LR02	LATIN CAPITAL LETTER R
LR12	LATIN CAPITAL LETTER R WITH ACUTE
LR22	LATIN CAPITAL LETTER R WITH CARON
LR42	LATIN CAPITAL LETTER R WITH CEDILLA
LS02	LATIN CAPITAL LETTER S
LS12	LATIN CAPITAL LETTER S WITH ACUTE
LS22	LATIN CAPITAL LETTER S WITH CARON
LS42	LATIN CAPITAL LETTER S WITH CEDILLA
LS16	LATIN CAPITAL LETTER S WITH CIRCUMFLEX
LT02	LATIN CAPITAL LETTER T
LT22	LATIN CAPITAL LETTER T WITH CARON
LT42	LATIN CAPITAL LETTER T WITH CEDILLA
LT62	LATIN CAPITAL LETTER T WITH STROKE
LT64	LATIN CAPITAL LETTER THORN
LU02	LATIN CAPITAL LETTER U
LU12	LATIN CAPITAL LETTER U WITH ACUTE
LU24	LATIN CAPITAL LETTER U WITH BREVE
LU16	LATIN CAPITAL LETTER U WITH CIRCUMFLEX
LU18	LATIN CAPITAL LETTER U WITH DIAERESIS
LU26	LATIN CAPITAL LETTER U WITH DOUBLE ACUTE
LU14	LATIN CAPITAL LETTER U WITH GRAVE
LU32	LATIN CAPITAL LETTER U WITH MACRON
LU44	LATIN CAPITAL LETTER U WITH OGONEK
LU28	LATIN CAPITAL LETTER U WITH RING ABOVE
LU20	LATIN CAPITAL LETTER U WITH TILDE
LV02	LATIN CAPITAL LETTER V
LW02	LATIN CAPITAL LETTER W

Table B.1 - *(continued)*

ID	Name
LW16	LATIN CAPITAL LETTER W WITH CIRCUMFLEX
LX02	LATIN CAPITAL LETTER X
LY02	LATIN CAPITAL LETTER Y
LY12	LATIN CAPITAL LETTER Y WITH ACUTE
LY16	LATIN CAPITAL LETTER Y WITH CIRCUMFLEX
LY18	LATIN CAPITAL LETTER Y WITH DIAERESIS
LZ02	LATIN CAPITAL LETTER Z
LZ12	LATIN CAPITAL LETTER Z WITH ACUTE
LZ22	LATIN CAPITAL LETTER Z WITH CARON
LZ30	LATIN CAPITAL LETTER Z WITH DOT ABOVE
LI64	LATIN CAPITAL LIGATURE IJ
LO64	LATIN CAPITAL LIGATURE OE
LA01	LATIN SMALL LETTER A
LA11	LATIN SMALL LETTER A WITH ACUTE
LA23	LATIN SMALL LETTER A WITH BREVE
LA15	LATIN SMALL LETTER A WITH CIRCUMFLEX
LA17	LATIN SMALL LETTER A WITH DIAERESIS
LA13	LATIN SMALL LETTER A WITH GRAVE
LA31	LATIN SMALL LETTER A WITH MACRON
LA43	LATIN SMALL LETTER A WITH OGONEK
LA27	LATIN SMALL LETTER A WITH RING ABOVE
LA19	LATIN SMALL LETTER A WITH TILDE
LA61	LATIN SMALL LETTER AE
LB01	LATIN SMALL LETTER B
LC01	LATIN SMALL LETTER C
LC11	LATIN SMALL LETTER C WITH ACUTE
LC21	LATIN SMALL LETTER C WITH CARON
LC41	LATIN SMALL LETTER C WITH CEDILLA
LC15	LATIN SMALL LETTER C WITH CIRCUMFLEX
LC29	LATIN SMALL LETTER C WITH DOT ABOVE
LD01	LATIN SMALL LETTER D
LD21	LATIN SMALL LETTER D WITH CARON
LD61	LATIN SMALL LETTER D WITH STROKE
LI61	LATIN SMALL LETTER DOTLESS I
LE01	LATIN SMALL LETTER E
LE11	LATIN SMALL LETTER E WITH ACUTE
LE21	LATIN SMALL LETTER E WITH CARON
LE15	LATIN SMALL LETTER E WITH CIRCUMFLEX
LE17	LATIN SMALL LETTER E WITH DIAERESIS
LE29	LATIN SMALL LETTER E WITH DOT ABOVE
LE13	LATIN SMALL LETTER E WITH GRAVE
LE31	LATIN SMALL LETTER E WITH MACRON
LE43	LATIN SMALL LETTER E WITH OGONEK
LN61	LATIN SMALL LETTER ENG
LD63	LATIN SMALL LETTER ETH
LF01	LATIN SMALL LETTER F
LG01	LATIN SMALL LETTER G
LG23	LATIN SMALL LETTER G WITH BREVE
LG42	LATIN SMALL LETTER G WITH CEDILLA

Table B.1 - *(continued)*

ID	Name
LG15	LATIN SMALL LETTER G WITH CIRCUMFLEX
LG29	LATIN SMALL LETTER G WITH DOT ABOVE
LH01	LATIN SMALL LETTER H
LH15	LATIN SMALL LETTER H WITH CIRCUMFLEX
LH61	LATIN SMALL LETTER H WITH STROKE
LI01	LATIN SMALL LETTER I
LI11	LATIN SMALL LETTER I WITH ACUTE
LI15	LATIN SMALL LETTER I WITH CIRCUMFLEX
LI17	LATIN SMALL LETTER I WITH DIAERESIS
LI13	LATIN SMALL LETTER I WITH GRAVE
LI31	LATIN SMALL LETTER I WITH MACRON
LI43	LATIN SMALL LETTER I WITH OGONEK
LI19	LATIN SMALL LETTER I WITH TILDE
LJ01	LATIN SMALL LETTER J
LJ15	LATIN SMALL LETTER J WITH CIRCUMFLEX
LK01	LATIN SMALL LETTER K
LK41	LATIN SMALL LETTER K WITH CEDILLA
LK61	LATIN SMALL LETTER KRA
LL01	LATIN SMALL LETTER L
LL11	LATIN SMALL LETTER L WITH ACUTE
LL21	LATIN SMALL LETTER L WITH CARON
LL41	LATIN SMALL LETTER L WITH CEDILLA
LL63	LATIN SMALL LETTER L WITH MIDDLE DOT
LL61	LATIN SMALL LETTER L WITH STROKE
LM01	LATIN SMALL LETTER M
LN01	LATIN SMALL LETTER N
LN63	LATIN SMALL LETTER N PRECEDED BY APOSTROPHE
LN11	LATIN SMALL LETTER N WITH ACUTE
LN21	LATIN SMALL LETTER N WITH CARON
LN41	LATIN SMALL LETTER N WITH CEDILLA
LN19	LATIN SMALL LETTER N WITH TILDE
LO01	LATIN SMALL LETTER O
LO11	LATIN SMALL LETTER O WITH ACUTE
LO15	LATIN SMALL LETTER O WITH CIRCUMFLEX
LO17	LATIN SMALL LETTER O WITH DIAERESIS
LO25	LATIN SMALL LETTER O WITH DOUBLE ACUTE
LO13	LATIN SMALL LETTER O WITH GRAVE
LO31	LATIN SMALL LETTER O WITH MACRON
LO61	LATIN SMALL LETTER O WITH STROKE
LO19	LATIN SMALL LETTER O WITH TILDE
LP01	LATIN SMALL LETTER P
LQ01	LATIN SMALL LETTER Q
LR01	LATIN SMALL LETTER R
LR11	LATIN SMALL LETTER R WITH ACUTE
LR21	LATIN SMALL LETTER R WITH CARON
LR41	LATIN SMALL LETTER R WITH CEDILLA
LS01	LATIN SMALL LETTER S
LS11	LATIN SMALL LETTER S WITH ACUTE

Table B.1 - *(continued)*

ID	Name
LS21	LATIN SMALL LETTER S WITH CARON
LS41	LATIN SMALL LETTER S WITH CEDILLA
LS15	LATIN SMALL LETTER S WITH CIRCUMFLEX
LS61	LATIN SMALL LETTER SHARP S
LT01	LATIN SMALL LETTER T
LT21	LATIN SMALL LETTER T WITH CARON
LT41	LATIN SMALL LETTER T WITH CEDILLA
LT61	LATIN SMALL LETTER T WITH STROKE
LT63	LATIN SMALL LETTER THORN
LU01	LATIN SMALL LETTER U
LU11	LATIN SMALL LETTER U WITH ACUTE
LU23	LATIN SMALL LETTER U WITH BREVE
LU15	LATIN SMALL LETTER U WITH CIRCUMFLEX
LU17	LATIN SMALL LETTER U WITH DIAERESIS
LU25	LATIN SMALL LETTER U WITH DOUBLE ACUTE
LU13	LATIN SMALL LETTER U WITH GRAVE
LU31	LATIN SMALL LETTER U WITH MACRON
LU43	LATIN SMALL LETTER U WITH OGONEK
LU27	LATIN SMALL LETTER U WITH RING ABOVE
LU19	LATIN SMALL LETTER U WITH TILDE
LV01	LATIN SMALL LETTER V
LW01	LATIN SMALL LETTER W
LW15	LATIN SMALL LETTER W WITH CIRCUMFLEX
LX01	LATIN SMALL LETTER X
LY01	LATIN SMALL LETTER Y
LY11	LATIN SMALL LETTER Y WITH ACUTE
LY15	LATIN SMALL LETTER Y WITH CIRCUMFLEX
LY17	LATIN SMALL LETTER Y WITH DIAERESIS
LZ01	LATIN SMALL LETTER Z
LZ11	LATIN SMALL LETTER Z WITH ACUTE
LZ21	LATIN SMALL LETTER Z WITH CARON
LZ29	LATIN SMALL LETTER Z WITH DOT ABOVE
LI63	LATIN SMALL LIGATURE IJ
LO63	LATIN SMALL LIGATURE OE
SM11	LEFT CURLY BRACKET
SP21	LEFT DOUBLE QUOTATION MARK
SP06	LEFT PARENTHESIS
SP17	LEFT-POINTING DOUBLE ANGLE QUOTATION MARK
SP19	LEFT SINGLE QUOTATION MARK
SM06	LEFT SQUARE BRACKET
SM30	LEFTWARDS ARROW
SA03	LESS-THAN SIGN
SP09	LOW LINE
SD31	MACRON
SM20	MASCULINE ORDINAL INDICATOR
SM17	MICRO SIGN
SM26	MIDDLE DOT

Table B.1 - *(concluded)*

ID	Name
SA07	MULTIPLICATION SIGN
SP30	NO-BREAK SPACE
SM66	NOT SIGN
SM01	NUMBER SIGN
SD43	OGONEK
SM18	OHM SIGN
SM02	PERCENT SIGN
SM25	PILCROW SIGN
SA01	PLUS SIGN
SA02	PLUS-MINUS SIGN
SC02	POUND SIGN
SP15	QUESTION MARK
SP04	QUOTATION MARK
SM53	REGISTERED SIGN
SM07	REVERSE SOLIDUS
SM14	RIGHT CURLY BRACKET
SP22	RIGHT DOUBLE QUOTATION MARK
SP07	RIGHT PARENTHESIS
SP18	RIGHT-POINTING DOUBLE ANGLE QUOTATION MARK
SP20	RIGHT SINGLE QUOTATION MARK
SM08	RIGHT SQUARE BRACKET
SM31	RIGHTWARDS ARROW
SD27	RING ABOVE
SM24	SECTION SIGN
SP14	SEMICOLON
SP32	SOFT HYPHEN
SP12	SOLIDUS
SP01	SPACE
NS01	SUPERSCRIPT ONE
NS03	SUPERSCRIPT THREE
NS02	SUPERSCRIPT TWO
SD19	TILDE
SM54	TRADE MARK SIGN
SM32	UPWARDS ARROW
SM13	VERTICAL LINE
NF20	VULGAR FRACTION FIVE EIGHTHS
NF18	VULGAR FRACTION ONE EIGHTH
NF01	VULGAR FRACTION ONE HALF
NF04	VULGAR FRACTION ONE QUARTER
NF21	VULGAR FRACTION SEVEN EIGHTHS
NF19	VULGAR FRACTION THREE EIGHTHS
NF05	VULGAR FRACTION THREE QUARTERS
SC05	YEN SIGN

Annex C

(informative)

Use of non-spacing diacritical marks

The supplementary set (see tables 1 and 3) contains 13 non-spacing diacritical marks which are used in combination with the letters of the basic Latin alphabet in the primary set, and with SPACE, to represent accented letters and diacritical marks as separate graphic characters.

The combinations of non-spacing diacritical marks and basic letters which are defined in this International Standard are given in table C.1 which also gives ligatures and other special letters.

NOTE 16: The term "non-spacing diacritical mark" is used in this International Standard in a metaphorical sense only. The "combination" of a non-spacing diacritical mark with a basic letter does not "generate" a new letter, but only indicates how a letter from the repertoire of this International Standard is to be coded.

Table C.1 - Combinations of diacritical marks and basic letters

BASIC LETTER	acute	grave	circum flex	diae resis	tilde	caron	breve	double acute	ring above	dot above	macron	cedilla	ogonek	ligature	others
aA	áÁ	àÀ	âÂ	äÄ	ãÃ		ăĂ		åÅ		āĀ		ąĄ		æÆ
cC	ćĆ		ĉĈ			čČ				ċĊ		çÇ			
dD						ďĎ									ðđĐ
eE	éÉ	èÈ	êÊ	ëË		ěĚ				ėĖ	ēĒ		ęĘ		
gG			ĝĜ				ğĞ			ġĠ		ģĢ			
hH			ĥĤ												ħĦ
iI	íÍ	ìÌ	îÎ	ïÏ	ĩĨ					İ	īĪ		įĮ	ĳĲ	ı
jJ			ĵĴ												
kK												ķĶ			ĸ
lL	ĺĹ					ľĽ						ļĻ			łŁŀĿ
nN	ńŃ				ñÑ	ňŇ						ņŅ			ŉŋŊ
oO	óÓ	òÒ	ôÔ	öÖ	õÕ			őŐ			ōŌ			œŒ	øØ
rR	ŕŔ					řŘ						ŗŖ			
sS	śŚ		ŝŜ			šŠ						şŞ			ß
tT						ťŤ						ţŢ			ŧŦþÞ
uU	úÚ	ùÙ	ûÛ	üÜ	ũŨ		ŭŬ	űŰ	ůŮ		ūŪ		ųŲ		
wW			ŵŴ												
yY	ýÝ		ŷŶ	ÿŸ											
zZ	źŹ					žŽ				żŻ					
(SP)	´	`	^	¨	~	ˇ	˘	˝	˚	˙	¯	¸	˛		

Annex D
(informative)

Use of Latin alphabetic characters in various languages

Table D.1 summarizes the use of the Latin alphabetic characters defined in this International Standard in 41 different languages (39 European languages, Afrikaans and Esperanto).

The 26 basic letters of the Latin alphabet have not been included in the table because they are considered indispensable in all languages, even though several languages do not require letters such as q or w for their own orthographies.

Table D.1 is intended to provide justification for the composition of the alphabetic part of the graphic character repertoire. It does not attempt to define which characters should, and which ones should not, be used in any language.

NOTE 16 Usage within any country or areas is to some extent dependent on the text, its intended use and its form of presentation. Furthermore, it is common in many languages to include "loan words" taken from other languages. The requirements for these spécialités have not been shown in this table except where such loan words have such long-standing or widespread use that they are now considered to be "naturalized" rather than "foreign" words in a particular language.

NOTE 17 See note 12 page 7.

NOTE 18 As a result of a spelling reform of Greenlandic in 1973, the following characters are depreciated, but still used in personal names:
LATIN CAPITAL LETTER I WITH TILDE
LATIN SMALL LETTER I WITH TILDE
LATIN SMALL LETTER KRA
LATIN CAPITAL LETTER U WITH TILDE
LATIN SMALL LETTER U WITH TILDE

NOTE 19 For spelling the Welsh language correctly, some more letters are in fact required. They are not included in the repertoire, but are only identified here:
LATIN CAPITAL LETTER W WITH ACUTE
LATIN SMALL LETTER W WITH ACUTE
LATIN CAPITAL LETTER W WITH GRAVE
LATIN SMALL LETTER W WITH GRAVE
LATIN CAPITAL LETTER W WITH DIAERESIS
LATIN SMALL LETTER W WITH DIAERESIS
LATIN CAPITAL LETTER Y WITH GRAVE
LATIN SMALL LETTER Y WITH GRAVE

Table D.1 - Use of Latin alphabetic characters

Character / Languages	á Á LA11–LA12	à À LA13–LA14	â Â LA15–LA16	ä Ä LA17–LA18	ã Ã LA19–LA20	ă Ă LA23–LA24	å Å LA27–LA28	ā Ā LA31–LA32	ą Ą LA43–LA44	æ Æ LA61–LA62	ć Ć LC11–LC12	ĉ Ĉ LC15–LC16	č Č LC21–LC22	ċ Ċ LC29–LC30	ç Ç LC41–LC42	ď Ď LD21–LD22	đ Đ LD61–LD62	ð Ð LD63–LD64	é É LE11–LE12	è È LE13–LE14	ê Ê LE15–LE16	ë Ë LE17–LE18	ě Ě LE21–LE22	ė Ė LE29–LE30	ē Ē LE31–LE32	ę Ę LE43–LE44	ĝ Ĝ LG13–LG14	ğ Ğ LG23–LG24	ġ Ġ LG29–LG30	ģ Ģ LG41–LG42	ĥ Ĥ LH15–LH16	ħ Ħ LH61–LH62
Afrikaans	x		x																x	x	x	x										
Albanian															x							x										
Basque																																
Breton																					x											
Catalan	x	x													x				x	x												
Croat											x		x				x															
Czech	x												x			x			x				x									
Danish	x						x			x									x													
Dutch	x	x		x															x			x										
English																			x	x	x	x										
Esperanto												x																x			x	
Estonian				x																												
Faroese	x									x								x														
Finnish				x																												
French		x	x							x					x				x	x	x	x										
Frisian			x	x															x		x	x										
Galician	x																		x													
German				x																												
Greenlandic	x		x		x		x			x									x													
Hungarian	x																		x													
Icelandic	x									x								x	x													
Irish	x																			x												
Italian		x																	x													
Lapp (Sami)	x		x	x			x			x			x				x		x	x		x										
Latvian								x					x												x		x					
Lithuanian									x				x						x					x		x						
Maltese		x												x						x										x		x
Norwegian							x			x									x													
Occitan	x	x													x				x	x		x										
Polish									x		x															x						
Portuguese	x	x	x		x														x		x											
Rhaeto-Romanic		x	x																x	x	x											
Romanian			x			x																										
(Scots) Gaelic	x	x																	x	x												
Slovak	x			x												x			x													
Slovene													x																			
Sorbian											x		x										x									
Spanish	x																															
Swedish	x			x					x										x													
Turkish			x												x				x			x							x			
Welsh	x	x	x	x															x	x	x	x										

Table D.1 - *(continued)*

Character / Languages	LI11 LI12 í Í	LI13 LI14 ì Ì	LI15 LI16 î Î	LI17 LI18 ï Ï	LI19 LI20 ĩ Ĩ	LI30 İ	LI31 LI32 ī Ī	LI43 LI44 į Į	LI61 ı	LI63 LI64 ĳ Ĳ	LJ11 LJ12 ĵ Ĵ	LK41 LK42 ķ Ķ	LK61 ĸ	LL11 LL12 ĺ Ĺ	LL21 LL22 ľ Ľ	LL41 LL42 ļ Ļ	LL61 LL62 ł Ł	LL63 LL64 ŀ Ŀ	LN11 LN12 ń Ń	LN19 LN20 ñ Ñ	LN21 LN22 ň Ň	LN41 LN42 ņ Ņ	LN61 LN62 ŋ Ŋ	LN63 ŉ	LO11 LO12 ó Ó	LO13 LO14 ò Ò	LO15 LO16 ô Ô	LO17 LO18 ö Ö	LO19 LO20 õ Õ	LO21 LO22 ő Ő	LO31 LO32 ō Ō	LO61 LO62 ø Ø
Afrikaans			x	x																				x			x	x				
Albanian																																
Basque																				x												
Breton																				x												
Catalan	x			x														x							x	x						
Croat																																
Czech	x																				x				x							
Danish	x																								x							x
Dutch	x			x					x																x			x				
English																																
Esperanto											x																					
Estonian																									x			x	x			
Faroese	x																															x
Finnish																												x				
French			x	x																							x					
Frisian				x																							x	x				
Galician	x																			x					x							
German																												x				
Greenlandic	x		x		x								x														x					x
Hungarian	x																								x			x		x		
Icelandic	x																								x			x				
Irish	x																								x							
Italian	x	x		x																					x	x						
Lapp (Sami)				x															x				x					x				x
Latvian							x					x				x						x									x	
Lithuanian								x																								
Maltese		x	x																							x						
Norwegian																									x		x					x
Occitan	x			x																					x	x						
Polish																	x		x						x							
Portuguese	x																								x		x		x			
Rhaeto-Romanic			x																							x	x	x				
Romanian			x																													
(Scots) Gaelic		x																							x	x						
Slovak	x													x	x						x				x		x					
Slovene																																
Sorbian																	x		x						x							
Spanish	x	x																		x					x							
Swedish																												x				
Turkish			x			x				x																		x				
Welsh	x	x	x	x																					x	x	x	x				

Table D.1 - *(concluded)*

Character / Languages	LO63 LO64 œ Œ	LR11 LR12 ŕ Ŕ	LR21 LR22 ř Ř	LR41 LR42 ŗ Ŗ	LS11 LS12 ś Ś	LS15 LS16 ŝ Ŝ	LS21 LS22 š Š	LS41 LS42 ş Ş	LS61 ß	LT21 LT22 ť Ť	LT41 LT42 ţ Ţ	LT61 LT62 ŧ Ŧ	LT63 LT64 þ Þ	LU11 LU12 ú Ú	LU13 LU14 ù Ù	LU15 LU16 û Û	LU17 LU18 ü Ü	LU19 LU20 ũ Ũ	LU23 LU24 ŭ Ŭ	LU25 LU26 ű Ű	LU27 LU28 ů Ů	LU31 LU32 ū Ū	LU43 LU44 ų Ų	LW15 LW16 ŵ Ŵ	LY11 LY12 ý Ý	LY15 LY16 ŷ Ŷ	LY17 LY18 ÿ Ÿ	LZ11 LZ12 ź Ź	LZ21 LZ22 ž Ž	LZ29 LZ30 ż Ż
Afrikaans																x														
Albanian																														
Basque																	x													
Breton															x		x													
Catalan														x			x													
Croat							x																						x	
Czech			x				x			x				x							x				x				x	
Danish														x			x													
Dutch																														
English																														
Esperanto						x													x											
Estonian							x										x												x	
Faroese														x											x					
Finnish																														
French	x														x	x	x										x			
Frisian														x		x	x													
Galician														x			x													
German									x																					
Greenlandic														x		x		x												
Hungarian														x			x			x										
Icelandic													x	x											x					
Irish														x																
Italian														x	x															
Lapp (Sami)							x					x																	x	
Latvian				x			x										x					x							x	
Lithuanian							x															x	x						x	
Maltese															x															x
Norwegian																														
Occitan														x			x													
Polish					x																							x		x
Portuguese														x			x													
Rhaeto-Romanic																	x													
Romanian								x			x																			
(Scots) Gaelic														x																
Slovak		x					x			x															x				x	
Slovene							x																						x	
Sorbian			x		x		x																					x	x	
Spanish														x			x													
Swedish																	x													
Turkish								x								x	x													
Welsh														x	x	x	x							x	x	x	x			

Annex E

(informative)

Alternative coded representation of the repertoire with no non-spacing diacritical marks

The character repertoire of this International Standard can also be represented in an alternative coding which does not require the use of the non-spacing diacritical marks.

This coded representation is a version of ISO/IEC 4873 Level 2 or 3 that uses the following graphic character sets from ISO/IEC 10367:

- the Basic G0 set (ISO-IR 6),
- Latin alphabet No 1 supplementary set (ISO-IR 100) or Latin alphabet No 5 supplementary set (ISO-IR 148),
- Latin alphabet No 2 supplementary set (ISO-IR 101),
- Supplementary set for Latin alphabets No 1 or 5, and 2 (ISO-IR 154).

Annex F
(informative)

Bibliography

[1] ISO/IEC 4873:1991, *Information technology - ISO 8-bit code for information interchange - Structure and rules for implementation.*

[2] ISO/IEC 6429:1992, *Information technology - Control functions for coded character sets.*

[3] ISO 8859-1:1987, *Information processing - 8-bit single-byte coded graphic character sets - Part 1: Latin alphabet No 1.*

[4] ISO 8859-2:1987, *Information processing - 8-bit single-byte coded graphic character sets - Part 2: Latin alphabet No 2.*

[5] ISO/IEC 8859-9:1989, *Information processing - 8-bit single-byte coded graphic character sets - Part 9: Latin alphabet No 5.*

[6] ISO/IEC 8859-10:1993, *Information technology - 8-bit single-byte coded graphic character sets - Part 9: Latin alphabet No 6*.

Annex G

(informative)

Main differences between the 1994 (second) edition of ISO/IEC 6937, and the present (third) edition of this International Standard

1 Annex G of the second edition was replaced with a new text.

2 The names of LATIN SMALL and CAPITAL LETTER AE were changed from the 1994 edition (where they were called LIGATURE), to align with ISO/IEC 10646-1.

3 For the same reason, the name MUSIC NOTE was changed to EIGHTH NOTE, and TRADEMARK SIGN was changed to TRADE MARK SIGN.

4 The following short identifiers were changed (see annex B, NOTE 15):

old	new
LA51	LA61
LA52	LA62
LG11	LG41
LI51	LI63
LI52	LI64
LO51	LO63
LO52	LO64
SM95	SM65
SM96	SM66

5 A number of small corrections and clarifications was applied.