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## **TITLE PAGE**

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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and nongovernmental, 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 JTC1. Draft International Standards adopted by the joint technical committee are circulated to the member 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 2375 was prepared by Joint Technical Committee ISO/IEC JTC1, *Information technology*, Subcommittee SC2, *Coded character sets*.

## Introduction

There are internationally agreed codes for the interchange of information among data processing systems and within message transmission systems.

Provision for additional characters is made by code extension techniques in which the additional characters or character sets are identified by escape sequences. The procedures for code extension and the structure and use of escape sequences are fully documented in ISO/IEC 2022. The latter defines classes of escape sequences, but does not assign specific meanings to individual escape sequences.

This International Standard specifies the procedures to be followed in preparing and maintaining a register of specific escape sequence meanings. The purpose of this register is to inform all concerned of character sets already developed and of the specific escape sequences allocated to them.

The publication of the register should promote compatibility in international information interchange and avoid duplication of effort in developing application-oriented character sets. Registration provides an identification for a character set but should not be regarded as a standardization procedure. Nevertheless, as a matter apart from registration the character set may, but need not, be the subject of an international, national, or other standard. When such a standard is prepared subsequent to the registration of an escape sequence, it would be appropriate for the escape sequence identifying the character set to be specified in the standard.

# Information technology — Procedure for registration of escape sequences and coded character sets

## 1 Scope

This International Standard specifies the procedures to be followed by a Registration Authority in preparing, maintaining, and publishing a register of escape sequences and of the characters or character sets they identify.

## 2 Field of application

**2.1** The escape sequences to which this International Standard refers to are those described in ISO/IEC 2022, with the exception of escape sequences described in that International Standard as being for private use.

**2.2** The use of these escape sequences includes code extension, that is, the provision of additional sets of characters, or of additional control functions in accordance with ISO/IEC 2022.

**2.3** An escape sequence registered in accordance with this International Standard shall serve as an identification of the character, the set of characters, or the control function associated with it in the register. Apart from such identification, registration shall not affect the status of the character, the set of characters, or the control function concerned.

## 3 Normative references

ISO/IEC 646, *Information processing – ISO 7-bit coded character set for information interchange*.

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

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

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

## 4 Registration Authority

**4.1** The Registration Authority shall be an organization nominated by the ISO/IEC JTC1 subcommittee concerned with coding and appointed by ISO/IEC JTC1 to act as the Registration Authority for the purpose of this International Standard.

**4.2** The Registration Authority shall maintain a register of the meanings assigned to escape sequences. The contents of this register shall be available upon request to ISO/IEC member bodies, to liaison organizations of ISO/IEC and to any interested party.

**4.3** The registration documents do not specify the rules in accordance with which a character or character sets identified by an escape sequence must be used. The documents, for example, standards, specifying such rules shall be specified in the registration documents.

## 5 Registration procedure

**5.1** With regard to the initial assignment of meanings to escape sequences and of subsequent additions to the register, the responsibilities of the Registration Authority shall be as follows.

**5.2** The Registration Authority shall receive from sponsoring authorities proposals for meanings to be assigned to escape sequences.

**5.3** The Registration Authority shall ascertain that the proposals received are formally in accordance with this International Standard, technically in accordance with ISO/IEC 2022, and, where applicable, with ISO/IEC 646 and ISO/IEC 4873; it shall ascertain that the proposals received meet the presentation practice of the the Registration Authority.

NOTE: Complete coding systems registered need not be in accordance with ISO/IEC 2022; see clause B.1.5. It is the escape sequence which must be in accordance with ISO/IEC 2022.

**5.4** The Registration Authority shall, where required, to indicate to the Sponsoring Authority the changes needed to meet the requirements of 5.3 above.

**5.5** The Registration Authority shall circulate the proposals first to the members of the Joint Advisory Committee as specified in clause 6, and subsequently shall circulate the proposals to the members of the coding subcommittee for a three-month information and comment period.

**5.6** The Registration Authority shall consider comments received and, when appropriate, shall incorporate them in the final document.

**5.7** The Registration Authority shall assign the escape sequence.

**5.8** The Registration Authority shall promulgate to all the member bodies and liaison organizations of ISO/IEC JTC1 the meaning that has been assigned to each escape sequence.

## 6 Review procedure

**6.1** Review is a formal procedure by which a proposed registration is examined by the Registration Authority's Joint Advisory Committee (RA-JAC) for technical suitability prior to circulation to members of the coding subcommittee as specified in clause 5.5.

**6.2** The RA-JAC shall be constituted as specified in annex D.

**6.3** The RA-JAC shall determine whether or not characters proposed map to existing characters in ISO/IEC 10646.

**6.4** The RA-JAC shall note the (U+)xxxx (or (U+)xxxxxxxx) code position of each character in the proposal which has a corresponding character in ISO/IEC 10646.

NOTE: It is strongly recommended that the Sponsoring Authority assist the RA-JAC by providing a proposed ISO/IEC 10646 mapping. [QUESTION: Who has the ultimate right of character identification? The RA-JAC or the Sponsoring Authority? What if a Sponsoring Authority disagrees with the current unification of Coptic with Greek or of CYRILLIC KU with LATIN Q? We have seen (EZH and YOGH) that the unifications are sometimes abandoned.]

**6.5** The RA-JAC shall determine whether or not character names proposed conform to the names of existing characters in ISO/IEC 10646. Where a character has been identified as being identical to a character encoded in ISO/IEC 10646, but where the name proposed does not conform to the name for that character in ISO/IEC 10646, the RA-JAC shall propose the amendment of that name in order to ensure conformity.

NOTE: It is strongly recommended that the Sponsoring Authority ensure that the names of characters mappable to ISO/IEC 10646 characters conform to the names used in ISO/IEC 10646. Where the name of ISO/IEC 10646 differs in the source standard, it is recommended that the ISO/IEC 10646 name be provided in parentheses following the source name.

## 7 Withdrawal procedure

**7.1** Withdrawal is a formal declaration by which the Sponsoring Authority informs the Registration Authority that it withdraws its support

of the proposal.

**7.2** Such a declaration may, but need not, be accompanied by a statement of the reasons for the withdrawal.

**7.3** The Registration Authority shall inform the interested parties of the reception of such declarations.

**7.4** Withdrawal has no effect on the registered proposal which shall remain in the register and continue to be identified by the allocated escape sequence.

## 8 Correction procedure

**8.1** Material errors, as for example typographical errors and glyph errors, shall be corrected by the Registration Authority as soon as detected.

**8.2** New corrected and dated pages of the register shall be issued.

## 9 Revision procedure

**9.1** In general, no changes to registrations are permitted, as this would be contrary to the principles on which the registration is based. An exception to this is the case of upwardly-compatible versions as specified by ISO/IEC 2022.

**9.2** The Registration Authority may exceptionally grant a waiver to international, governmental organizations issuing internationally recognized and world-wide implemented standards. However, the possibility that a registration may be modified in future without allocation of a new escape sequence shall be mentioned in the first application papers and in the register.

## 10 Appeal procedure

**10.1** Appeal by a Sponsoring Authority can be made in the following instances.

**10.1.1** Appeal by a Sponsoring Authority can be made if it disagrees with the Registration Authority on whether the application meets the requirement of clause 5.3.

**10.1.2** Appeal by a Sponsoring Authority can be made if the Registration Authority refuses to grant a waiver according to 9.2.

**10.1.3** Appeal by a Sponsoring Authority can be made if at least four member bodies of the subcommittee concerned with coding object to a forthcoming publication of a registration by the Registration Authority, but solely on the ground of

an assertion by those member bodies that the requirements of clause 5.3 are not met.

**10.1.4** Appeal by a Sponsoring Authority can be made if at least four member bodies of the subcommittee concerned with coding object to a decision of the Registration Authority to grant a waiver according to 9.2.

**10.2** Appeals shall be filed with the Registration Authority by registered mail [IS THE REGISTERED MAIL STIPULATION REQUIRED OR SHALL IT BE MODIFIED?]

- either within 30 days of reception of the refusal of the Registration Authority, or
- before the end of the circulation period [TO WHOM? THE RA-JAC OR THE MEMBER BODIE?] according to clause 5.5.

**10.3** Appeals shall be submitted by the Registration Authority within 30 days, after receipt in the case of 10.1.1 or 10.1.2, or after the end of the circulation period in the case of 10.1.3 or 10.1.4, to the members of the Joint Advisory Committee (see annex D). If the matter cannot be resolved by the Joint Advisory Group the appeal will be submitted to the P-members of the subcommittee for vote according to clause 3.4.2 of part 1 of the Directives for the technical work of ISO. [CHECK THIS REFERENCE; DOES IT APPLY TO JTC1 PROCEDURES?]

## 11 Sponsoring Authorities

**11.1** Proposals concerning the meanings of escape sequences may be made by the following, which for the purposes of this International Standard are Sponsoring Authorities:

- any ISO or IEC technical committee or subcommittee;
- any group within the ISO/IEC subcommittee concerned with coding in information processing, appointed by the subcommittee for purposes connected with code extension or the use of escape sequences;
- any member body of ISO or IEC;
- any international organization having liaison status with ISO/IEC or with any of its technical committees or subcommittees.

SHOULD A DISTINCTION BETWEEN "ISO/IEC" AND "ISO and IEC" BE MADE HERE?

NOTE: In the instance of proposals concerning single additional control functions to be represented by the F<sub>s</sub>

escape sequence (see ISO/IEC 2022), the Sponsoring Authority may only be the coding subcommittee (see annex C). This is necessary because of the extremely limited number of escape sequences available for that purpose.

**11.2** The responsibilities of a Sponsoring Authority shall be as follows.

**11.2.1** A Sponsoring Authority shall receive proposals concerning the meanings of escape sequences from within its respective countries or organizations.

**11.2.2** A Sponsoring Authority shall effect such rationalization or coordination of these proposals as it may desire.

**11.2.3** A Sponsoring Authority shall forward to the Registration Authority those proposals that have its support.

**11.2.4** A Sponsoring Authority shall make known within its respective country or organization the outcome of the registration procedure.

NOTE: This International Standard requires only that an application for registration meets the requirements of clause 5.3. But a Sponsoring Authority is free to specify additional requirements to be met in order to receive its support.

**11.3** Proposals shall be forwarded to the Registration Authority on a standard form, the layout of which shall be available from the Registration Authority.

**Annex A**  
(normative)  
**Registration Authority**

**A.1** The Registration Authority shall be an organization actively participating in the work of the subcommittee concerned with coding. In particular a technical officer or officers of the Registration Authority shall attend the meetings of the subcommittee and of the working group(s) involved with the work on ISO/IEC 646, ISO/IEC 2022, ISO/IEC 4873, ISO/IEC 8859, ISO/IEC 10646, and on other coding standards where required.

**A.2** The Registration Authority shall maintain an updated list of the owners of the International Register. New registrations and any other pertinent communication concerning the register shall be sent to all persons on this list. The Registration Authority may request from time to time that owners confirm their continuing interest in receiving new registrations and may drop from the list those having not confirmed such interest.

**A.3** The Registration Authority shall maintain an explanatory document called "Practice of the Registration Authority" available upon request to all interested parties. It shall specify the presentation requirements for applications for registration, for example fonts for the code table, terminology, identification of unused positions, etc., so as to ensure a uniform presentation of all registrations, thus making comparison among them easier.

**Annex B**  
(normative)  
**International Register**

**B.1 Registration Documents**

**B.1.1 Layout**

The International Register (IR) shall be issued in loose-leaf and electronic formats. Each registration shall comprise the following parts, as applicable, depending on the type of registration.

**B.1.1.1 Cover page**

The cover page shall list:

- the type of registration;
- the registration number;
- the date of registration;
- the allocated escape sequence;
- a short name for the character or character set;
- a short description;
- the Sponsoring Authority;
- the origin or originator of the character or character set;
- a general indication of the intended field of application.

Where applicable, the standard(s) of which the character set is a part shall be mentioned in the short description or under "origin".

**B.1.1.2 Code tables**

**B.1.1.1.1 Graphic character sets**

The layout of the code table shall be that given in annex E.1, E.2, and E.3 (derived from that of ISO/IEC 646 and ISO/IEC 4873, respectively). For multiple-byte sets a suitable layout shall be used.

**B.1.1.1.2 Control functions**

For C0 sets the layout of the tables shall be that given in annex E.4 (derived from columns 0 and 1, and 00 and 01 of ISO/IEC 646 and ISO/IEC 4873, respectively). For C1 sets the two-character escape sequences of type ESC  $F_s$  shall be listed for 7-bit coding. For 8-bit coding the table shall be that given in annex E.5 (derived from columns 08 and 09 of ISO/IEC 4873).



### B.1.1.3 Character names

B.1.1.3.1 The next pages of registrations of graphic character sets shall list all positions and indicate the name of the character allocated to each position. The next pages of registrations of control character sets shall list the control functions of the set indicating their name and their definition.

B.1.1.3.2 Unused positions shall bear the mention "(This position shall not be used)". In interchange the presence of the bit combinations corresponding to these positions shall be an error condition.

B.1.1.3.3 Short notes may be added to the registrations of graphic character sets only where absolutely required for the understanding of the registration.

B.1.1.3.4 "Combining characters" (as defined in ISO/IEC 10646) shall be identified as such in a note.

### B.1.2 Use with other registered sets

If a registered set is intended for use in combination with one or more other registered sets, this shall be indicated.

### B.1.3 Subsets and supersets

If a registered set is intentionally a subset or a superset of one or more other registered sets, this shall be indicated.

### B.1.4 Revised standards

When a registered set is based on a standard that is subsequently revised, and additional page to the original registration shall be issued identifying the new registration.

### B.1.5 Complete coding systems

Registration of complete coding systems other than those of ISO/IEC 2022 may, but need not, comprise only the cover page. The cover page shall indicate whether the return escape sequence ESC 2/5 4/0 applies. If the registration does not include the code table and list of character names, the cover page shall also indicate from where a document, available publicly, describing the complete coding system can be obtained. No complete coding system can be registered unless such a document exists and is identified unless the registration includes the code table and list of character names.

NOTE: A complete coding system may be a character set not in accordance with ISO/IEC 2022.

### B.1.6 Identical sets

If a new application for registration contains a set of characters identical with an already-registered set, it shall not be registered, as its set will already have been identified by an escape sequence. Two sets are deemed to be identical if

- the number of characters is the same;
- the names of the characters are the same according to the terminology of the Registration Authority;
- the same positions are used for the same characters;
- both sets are of the same type, in particular both a C0 or a C1 set;
- the definitions of control characters are functionally equivalent (a more restricted definition is not considered equivalent);
- graphic characters have the same geometric shape apart from aesthetic variations between fonts;
- any "non-spacing" or "combining" characters are in the same positions.

### B.1.7 Repertoire

For graphic character sets the registration specifies only the characters of the set and their coded representations, as shown in the code table of the registration. It does not specify a repertoire of characters which can be obtained by combining the characters of the set, for example by means of sequences of BACKSPACE and "nonspacing characters" (as defined in ISO/IEC XXXXX) or by means of sequences of base characters and "combining characters" (as defined in ISO/IEC 10646).

### B.2 Allocation of final characters

Final characters shall be allocated by the Registration Authority in ascending order. This allocation will only be made immediately prior to publication of the registration, that is, after completion of all procedural steps.

No final character(s) can be reserved for future applications.

A final character once allocated to a registered

character or character set can never be re-allocated to another character or character set.

### **B.3 Identification of Registration**

Registrations should be identified by "ISO-IR" followed by a space and the registration number.

*Examples:*

ISO-IR 16

for the particular ISO/IEC 646 version for the Portuguese language registered on 1976-12-30.

ISO-IR 48

for the set of control functions registered on 1981-07-15.

Identification using the contents of fields "name" and "origin" of the cover page should preferably be avoided, unless the "origin" field specifies a national or International Standard.

### **B.4 Withdrawn registrations**

When a registration has been withdrawn in accordance with clause 7 of ISO/IEC 2375, the Registration Authority shall inform all interested parties by issuing a new page of the International Register sent to new owners after the date of withdrawal. The withdrawn registration shall remain in the International Register.

### **B.5 Multiple registrations for the same application**

**B.5.1** Any Sponsoring Authority is entitled to apply for registration of a character set for a given application, for example a programming language or a natural language, whether or not a registration already exists, even if it originates from a national or International Standard.

**B.5.2** The fact that a registration for exactly the same field of application exists cannot be a reason for objection to the new registration.

### **B.6 Valid grounds for appeals**

**B.6.1** The valid grounds for an appeal against a decision of the Registration Authority or a forthcoming publication of a registration application are listed in clauses 10.1.1, 10.1.2, 10.1.3, and 10.1.4 of ISO/IEC 2375.

**B.6.2** Appeals based on other reasons shall not be considered valid and shall be disregarded. In particular the following objections shall not be considered valid:

- there is one or more registrations for identically the same purpose;
- the registration is incompatible with International Standards, whether or not a character from these International Standards is registered;
- an allegation is made that that the technical content of the registration does not achieve its alleged purpose;
- the "origin" field contains the name of a commercial organization or a trade mark;
- editorial comments are rejected by the Registration Authority

**B.6.3** A Sponsoring Authority having specified requirements for its support in addition to those of ISO/IEC 2375 may include requirements of the above type in its own set of requirements. This matter shall be dealt with by each Sponsoring Authority and not by the Registration Authority.

## **Annex C** (normative)

### **Criteria for the allocation of ESC F<sub>s</sub> sequences**

**C.1** Priority in the allocation of ESC F<sub>s</sub> sequences will be given to control functions used for general code extension purposes.

**C.2** Other candidates for ESC F<sub>s</sub> representation should be of a general nature with broad applicability. The action of such control functions should be largely independent of the graphic or control character sets invoked at the time.

**C.3** The control function should be logically independent from other control functions, except if it forms one half of a complementary pair, for example in an ON/OFF action.

**C.4** Only the subcommittee concerned with coding shall be the Sponsoring Authority for single control functions represented by ESC F<sub>s</sub>. Any candidate for such allocation shall be submitted to this subcommittee under clause 11 of this International Standard as a Sponsoring Authority for escape sequences other than ESC F<sub>s</sub>.

**C.5** Any proposal for a new ESC F<sub>s</sub> sequence shall include a complete definition of the control function with an indication of the overall environment in which it will be used. A justification for the need for a specially efficient coding of the control function shall also be submitted.

## **Annex D** (normative)

### **The Registration Authority's Joint Advisory Committee (JAC)**

**D.1** The subcommittee concerned with coding shall set up a Joint Advisory Committee of five members.

**D.2** The RA-JAC shall consist of a representative of the Registration Authority and four other members elected by P-members of the subcommittee. These members may be members of the subcommittee or members of one or more bodies with a liaison relationship to the subcommittee. At least one of the members of the RA-JAC shall represent the Unicode Technical Committee. The members of the RA-JAC shall be appointed or confirmed at each plenary meeting of the subcommittee.

**D.3** The task of the RA-JAC shall be as follows.

**D.3.1** The RA-JAC shall review each application for registration according to clause 6 of ISO/IEC 2375.

**D.3.2** The RA-JAC shall consider appeals received by the Registration Authority.

**D.3.3** The RA-JAC shall act as mediator between the Registration Authority and the appealing parties.

**D.3.4** The Registration Authority shall yield if four-fifths of the members of the RA-JAC consider the appeal justified.

**D.3.5** The RA-JAC shall, when required, edit the documents to be submitted to a vote according to clause 10.3 of ISO/IEC 2375.

**Annex E**  
(normative)

**Layout of code tables**

**E.1 7-bit graphic character sets: G0 set**

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

E.2 7-bit graphic character sets: G1 set

				b <sub>8</sub>	1	1	1	1	1	1	1	1	1		
				b <sub>7</sub>	0	0	0	0	1	1	1	1	1		
				b <sub>6</sub>	0	0	1	1	0	0	1	1	1		
				b <sub>5</sub>	0	1	0	1	0	1	0	1	1		
					08	09	10	11	12	13	14	15			
b <sub>4</sub>	b <sub>3</sub>	b <sub>2</sub>	b <sub>1</sub>												
0	0	0	0	00											0
0	0	0	1	01											1
0	0	1	0	02											2
0	0	1	1	03											3
0	1	0	0	04											4
0	1	0	1	05											5
0	1	1	0	06											6
0	1	1	1	07											7
1	0	0	0	08											8
1	0	0	1	09											9
1	0	1	0	10											A
1	0	1	1	11											B
1	1	0	0	12											C
1	1	0	1	13											D
1	1	1	0	14											E
1	1	1	1	15											F
					8	9	A	B	C	D	E	F			hex

E.3 8-bit graphic character sets:

				b <sub>8</sub>	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	
				b <sub>7</sub>	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	1	
				b <sub>6</sub>	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	1	
				b <sub>5</sub>	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	1	
					00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15		
b <sub>4</sub>	b <sub>3</sub>	b <sub>2</sub>	b <sub>1</sub>																			
0	0	0	0	00			SP	0	@	P	`	p			NBSP	°	À	Ð	à	ö	0	
0	0	0	1	01			!	1	A	Q	a	q			ı	±	Á	Ñ	á	ñ	1	
0	0	1	0	02			"	2	B	R	b	r			ç	²	Â	Ò	â	ò	2	
0	0	1	1	03			#	3	C	S	c	s			£	³	Ã	Ó	ã	ó	3	
0	1	0	0	04			\$	4	D	T	d	t			€	Ž	Ä	Ô	ä	ô	4	
0	1	0	1	05			%	5	E	U	e	u			¥	μ	Å	Õ	å	õ	5	
0	1	1	0	06			ξ	6	F	V	f	v			Š	¶	Æ	Ö	æ	ö	6	
0	1	1	1	07			'	7	G	W	g	w			§	·	Ç	×	ç	÷	7	
1	0	0	0	08			(	8	H	X	h	x			š	ž	È	Ø	è	ø	8	
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					0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	hex	

E.4 C0 control function sets

				b <sub>7</sub>	0 0				
				b <sub>6</sub>	0 0				
				b <sub>5</sub>	0 1				
				0 1					
b <sub>4</sub>	b <sub>3</sub>	b <sub>2</sub>	b <sub>1</sub>						
0	0	0	0	0	NUL	DLE	0		
0	0	0	1	1	SOH	DC1	1		
0	0	1	0	2	STX	DC2	2		
0	0	1	1	3	ETX	DC3	3		
0	1	0	0	4	EOT	DC4	4		
0	1	0	1	5	ENQ	NAK	5		
0	1	1	0	6	ACK	SYN	6		
0	1	1	1	7	BEL	ETB	7		
1	0	0	0	8	BS	CAN	8		
1	0	0	1	9	HT	EM	9		
1	0	1	0	10	LF	SUB	A		
1	0	1	1	11	VT	ESC	B		
1	1	0	0	12	FF	IS <sub>4</sub>	C		
1	1	0	1	13	CR	IS <sub>3</sub>	D		
1	1	1	0	14	SO	IS <sub>2</sub>	E		
1	1	1	1	15	SI	IS <sub>1</sub>	F		
				0 1				he <sub>+</sub>	

				b <sub>8</sub>	0 0				
				b <sub>7</sub>	0 0				
				b <sub>6</sub>	0 0				
				b <sub>5</sub>	0 1				
				00 01					
b <sub>4</sub>	b <sub>3</sub>	b <sub>2</sub>	b <sub>1</sub>						
0	0	0	0	00			0		
0	0	0	1	01			1		
0	0	1	0	02			2		
0	0	1	1	03			3		
0	1	0	0	04			4		
0	1	0	1	05			5		
0	1	1	0	06			6		
0	1	1	1	07			7		
1	0	0	0	08			8		
1	0	0	1	09			9		
1	0	1	0	10			A		
1	0	1	1	11			B		
1	1	0	0	12			C		
1	1	0	1	13			D		
1	1	1	0	14			E		
1	1	1	1	15			F		
				0 1				he <sub>+</sub>	

E.5 C1 control function sets

				b <sub>8</sub>	1	1		
				b <sub>7</sub>	0	0		
				b <sub>6</sub>	0	0		
				b <sub>5</sub>	0	1		
				08		09		
b <sub>4</sub>	b <sub>3</sub>	b <sub>2</sub>	b <sub>1</sub>					
0	0	0	0	00				0
0	0	0	1	01				1
0	0	1	0	02				2
0	0	1	1	03				3
0	1	0	0	04				4
0	1	0	1	05				5
0	1	1	0	06				6
0	1	1	1	07				7
1	0	0	0	08				8
1	0	0	1	09				9
1	0	1	0	10				A
1	0	1	1	11				B
1	1	0	0	12				C
1	1	0	1	13				D
1	1	1	0	14				E
1	1	1	1	15				F
				8		9		hex



**Annex F**  
(informative)

**Principal differences between this fourth edition of ISO/IEC 2375 (1999-03-23) and the third edition of ISO 2375 (1985-11-01)**

- Clauses have been renumbered.
- A new clause 6 “Review procedures” has been added.
- Layouts of the code tables in annex B are no longer specified by reference to external standards but are instead presented in annex E.
- The term “non-spacing character” has been updated to the term “combining character” in B.1.1.3, with reference to ISO/IEC 10646.
- The possibility to attach code tables and names to registration of complete coding systems has been added to B.1.5.
- 10.1.3 includes the new text “of an assertion by those member bodies”.