INTERNATIONAL STANDARD

ISO/IEC 10367

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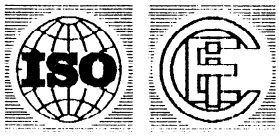
Information technology — Standardized coded graphic character sets for use in 8-bit codes

Technologies de l'information — Jeux de caractères graphiques codés normalisés à utiliser dans les codes à un octet



Reference number
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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 non-governmental, 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 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 10367 was prepared by Joint Technical Committee ISO/IEC JTC1, *Information technology*.

Annexes A and C form an integral part of this International Standard. Annex B is for information only.

Introduction

In the course of the past years two different 8-bit codes were developed by ISO/IEC/JTC1/SC2. An International Standard, ISO/IEC 6937, was developed with a view to satisfying the needs of CCITT-defined Telematic services: Teletex and Videotex. It is based on a primary and supplementary set of graphic characters, the latter containing a series of so-called non-spacing diacritical marks for the generation of accented letters. Thus, the coded representation of a graphic character may consist of one or more bit combinations. The standard specifies the allowed repertoire of 333 characters. ISO/IEC 6937 is applicable not only to 8-bit coding but also to 7-bit coding.

A family of 8-bit code tables, ISO 8859, was also developed to satisfy a need for single-byte coded graphic characters in particular in data processing applications. It consists of several parts, each specifying an 8-bit single-byte coded graphic character set of up to 191 characters. The selection of characters for each set is such that it satisfies the needs of several languages of a large, relatively coherent, geographical area. The different parts of ISO 8859 cover not only the Latin script but also the Arabic, Cyrillic, Greek and Hebrew scripts.

Many applications need a code structure which permits more than one script to be represented in information interchange, for example Latin Alphabet No. 1 ("Western" Europe) with the Greek script or Latin Alphabet No. 2 ("Eastern" Europe) with the Cyrillic script. For this purpose ISO/IEC 4873 is suitable since it allows up to 382 graphic characters grouped in four G sets, by using a small selection of the facilities offered by ISO 2022.

Within this structure the graphic character sets from the various parts of ISO 8859 may be used in conjunction with each other. Since some characters appear in more than one of these sets, rules are needed to avoid violation of the principle of one-to-one relationship between a character and its coded representation when such sets are used together. The new version of ISO/IEC 4873 (3rd edition of 1991) contains such rules.

In a similar way ISO/IEC 6937 may be used in conjunction with additional non-Latin graphic character sets taken from the parts of ISO 8859.

Thus this International Standard specifies a collection of coded graphic character sets usable within the structure of ISO/IEC 4873.

Information technology — Standardized coded graphic character sets for use in 8-bit codes

1 Scope

This International Standard specifies a unique coded graphic character set for use as G0 set and a series of coded graphic character sets of up to 96 characters for use as the G1, G2 and G3 sets in versions of ISO/IEC 4873. All sets specified in this International Standard are shown as elements of an 8-bit code.

These sets are intended for use in data and text processing applications and may also be used for information interchange. They contain graphic characters used for general purpose applications in typical office environments.

This International Standard does not specify the control functions to be allocated to the C0 and C1 sets of versions of ISO/IEC 4873. ISO/IEC 6429 specifies these control functions; the required control functions shall be selected from that International Standard depending on the application considered.

2 Conformance

2.1 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 the coded representations of characters within that CC-data-element conform to the requirements of clause 6 and of ISO/IEC 4873.

A claim of conformance shall identify the selected character sets.

2.2 Conformance of devices

A device is in conformance with this International Standard if it conforms to the requirements of 2.2.1, and either or both of 2.2.2 and 2.2.3. A claim of conformance shall identify the document which contains the description specified in 2.2.1, and shall identify the selected character sets.

2.2.1 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 him, as specified respectively in 2.2.2 and 2.2.3.

2.2.2 Originating devices

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

2.2.3 Receiving devices

A receiving device shall be capable of receiving and interpreting any coded representations of characters that are within a CC-data-element, and that conform to 2.1, and shall make the corresponding characters available to its user in such a way that the user can identify them from among those from the selected character sets, and can distinguish them from each other.

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 listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2022:1986, *Information technology - ISO 7-bit and 8-bit coded character sets - Code extension techniques*

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

ISO/IEC 6429: [1], *Information technology - Control functions for 7-bit and 8-bit coded character sets.*

ISO/IEC 6937: [1] , *Information technology - Coded graphic character set for the communication of texts using the Latin alphabet.*

ISO/IEC 8859, *Information processing - 8-bit single-byte coded graphic character sets.*

International Register of Coded Character Sets to Be Used with Escape Sequences. (ISO 2375)

1) To be published.