

---

# International Standard 2955

---

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

---

## Information processing — Representation of SI and other units in systems with limited character sets

*Traitement de l'information — Représentation des unités du Système international et d'autres unités dans des systèmes comprenant des jeux de caractères limités*

**Second edition — 1983-05-15**

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been authorized has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2955 was developed by Technical Committee ISO/TC 97, *Information processing systems*, and was circulated to the member bodies in October 1980.

It has been approved by the member bodies of the following countries :

|                |             |                       |
|----------------|-------------|-----------------------|
| Australia      | Ireland     | South Africa, Rep. of |
| Belgium        | Italy       | Spain                 |
| Canada         | Japan       | Sweden                |
| Cuba           | Netherlands | Switzerland           |
| Finland        | New Zealand | United Kingdom        |
| France         | Poland      | USSR                  |
| Germany, F. R. | Romania     |                       |

No member body expressed disapproval of the document.

This second edition cancels and replaces the first edition (i.e. ISO 2955-1974).

# Information processing — Representation of SI and other units in systems with limited character sets

## 1 Scope and field of application

**1.1** This International Standard specifies two sets of representations, for SI units and other internationally recognized units defined in ISO 1000 along with their decimal multiples and sub-multiples formed by the use of prefixes, for use in data interchange by systems with limited graphic character sets.

NOTE — The representations of units as listed in this International Standard are intended for use only in systems with limited graphic character set capabilities. They are not intended to replace the international symbols in other applications. ISO 31 and ISO 1000 provide the approved international symbols.

**1.2** The two sets of representations are :

**Form I :** For systems which have the capability to use both upper and lower case letters (double case), digits, and other graphics, at least the graphical symbols apostrophe ('), quotation mark ("), hyphen (-), full stop or period (.), and solidus (/), but which do not have the capability to use the Greek letters  $\Omega$  and  $\mu$ , the degree symbol ( $^{\circ}$ ), and letters, digits and signs in the superscript position.

NOTE — The ISO 646 alphabet is an example of such a character set.

**Form II :** For systems which have the capability to use single-case letters only (either upper or lower), digits, and other graphics, at least the graphical symbols hyphen (-), full stop or period (.), and solidus (/), but which do not have the capability to use the Greek letters  $\Omega$  and  $\mu$ , the degree symbol ( $^{\circ}$ ), and letters, digits and signs in the superscript position.

NOTE — CCITT alphabet No. 2 is an example of such a character set.

The annex contains a brief description of the International System (SI) of units.

**1.3** This International Standard applies to the interchange of information among data processing systems and associated equipment, and within message transmission systems.

It does not apply to printed matter for publication or to other forms of public information transfer. In these cases, the representations of Forms I and II should be replaced by the international symbols in ISO 31 and ISO 1000 or, if these are not available, by the unabbreviated unit names.

## 2 References

ISO 31, *Quantities, units and symbols*.

ISO 646, *7-bit coded character set for information processing interchange*.

ISO 1000, *SI units and recommendations for the use of their multiples and of certain other units*.

## 3 Requirements for the representation of units

**3.1** Units and prefixes shall be represented as shown in the appropriate columns in tables 1 and 2.

NOTE — These tables also contain the international symbols in ISO 31 and ISO 1000.

**3.2** In narrative (free text) data, a space character shall be used to separate the numerical value and the unit representation, for example 10 m, 2 m<sup>2</sup>. In formatted data, as in records, the use or non-use is defined in the format description.