INTERNATIONAL STANDARD

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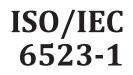
Second edition
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Information technology — Structure for the identification of organizations and organization parts —

Part 1:
Identification of organization identification schemes

Technologies de l'information — Structure pour l'identification des organisations et des parties d'organisations —

Partie 1: Identification des systèmes d'identification d'organisations

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Contents

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 32, *Data management services*.

This second edition cancels and replaces the first edition (ISO/IEC 6523-1:1998), which has been technically revised.

The main changes are as follows:

— extended length of OI and allowed UNICODE;

— OPIS content limited to one character from "0" to "9";

— updated Annex A to reflect the limitation of OPIS content and the current body responsible for the standard and other similar changes;

— changes in application to ISO/IEC drafting rules in force.

A list of all parts in the ISO/IEC 6523 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

Introduction

The increased use of data processing and telecommunications capabilities in commercial, governmental and other applications has made possible the interchange of information in an effective machine-processable form. As this type of automated interchange increases, the need for International Standards covering data also increases. The ISO/IEC 6523 series, defining a structure for a globally unique and unambiguous identification of organizations and organization parts, is one of a number of International Standards that have been developed as a means for improving the accuracy and effectiveness of data processing and data interchange.

In the development of this document, it has been recognized that a single method for identifying all organizations on an international basis is neither feasible nor practicable. Instead, this document recognizes existing methods of identification and provides a means for systematically incorporating these in a uniform structure for the purposes of information interchange. In this document, an organization can be identified by more than one identification method.

The use of the structure for the identification of organizations and organization parts, for the purpose of interchange of information, will:

a) improve the accuracy of the identification of organizations and organization parts, and hence of the interchange of data;

b) reduce the need for human intervention in the interchange of information in machine-to-machine environments;

c) diminish the time required to specify interchange agreements;

d) as a consequence of the foregoing, reduce the cost of the interchange of data.

Examples illustrating the use of the structure for the identification of organizations and organization parts are given in Annex B.

Information technology — Structure for the identification of organizations and organization parts —

Part 1:
Identification of organization identification schemes

1 Scope

This document specifies a structure for globally and unambiguously identifying organizations, and parts thereof, for the purpose of information interchange.

This document also gives recommendations regarding cases where prior agreements can be concluded between interchange partners.

This document does not specify file organization techniques, storage media, languages, etc. to be used in its implementation.

NOTE   The procedure for registration of organization identification schemes is specified in ISO/IEC 6523-2.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 6523-2, *Information technology — Structure for the identification of organizations and organization parts — Part 2: Registration of organization identification schemes*

ISO/IEC 10646, *Information technology — Universal coded character set (UCS)*

3 Terms, definitions and abbreviated terms

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
organization
unique framework of authority within which a person or persons act, or are designated to act, towards some purpose

EXAMPLE

a)   An organization incorporated under law.

b)   An unincorporated organization or activity providing goods and/or services including:

1)   partnerships;

   2)   social or other non-profit organizations or similar bodies in which ownership or control is vested in a group of individuals;

   3)   sole proprietorships;

   4)   governmental bodies.

c)   Groupings of the above types of organizations where there is a need to identify these in information interchange.

3.2
organization part
any department, service or other entity within an *organization* (3.1), which needs to be identified for information interchange

3.3
data element
<organization of data> unit of data that is considered in context to be indivisible

Note 1 to entry: The definition states that a data element is "indivisible" in some context. This means that it is possible that a data element considered indivisible in one context (e.g., telephone number) may be divisible in another context, (e.g. country code, area code, local number).

EXAMPLE   The data element "age of a person" with values consisting of all combinations of 3 decimal digits.

[SOURCE: ISO/IEC 2382:2015, 2121599, modified — Example moved to the end without the Note to entry prefix, other Notes to entry replaced by the above].

3.4
data element value
value out of a set of permissible values pertaining to a *data element* (3.3)

3.5
identifier
character or group of characters constituting a *data element value* (3.4) used to identify or name an object and possibly to indicate certain properties of that object

3.6
identification scheme
system for allocating identifiers to registered objects

3.7
organization identification scheme
identification scheme (3.6) dedicated to the unique identification of *organizations* (3.1)

3.8
International Code Designator
ICD
data element (3.3) used to uniquely identify an *organization identification scheme* (3.7)

3.9
International Code Designator value
ICD value
identifier (3.5) allocated to a particular *organization identification scheme* (3.7)

3.10
organization identifier
OI
identifier (3.5) assigned to an *organization* (3.1) within an *organization identification scheme* (3.7), and unique within that scheme

3.11
organization part identifier
OPI
identifier ([3.5](#)) allocated to a particular *organization part* ([3.2](#))

3.12
OPI source indicator
OPIS
data element ([3.3](#)) used to specify the source for the *organization part identifier* ([3.11](#))

3.13
OPIS value
particular value (digit or capital letter) taken by the *OPIS* ([3.12](#)) to designate the source of an *organization part identifier* ([3.11](#))

3.14
character repertoire
set of characters, considered independently of its encoding

4 Structure for the identification of organizations and organization parts

4.1 Purpose and components of the structure

The purpose of the structure for the identification of organizations and organization parts is to provide a global and unambiguous identification of one organization among all other organizations, and of any part of it as appropriate.

However, a single method for identifying all organizations on an international basis is neither feasible nor practicable. Therefore, this document recognizes existing methods of identification (identification schemes) and defines the rules to provide an International Code Designator to uniquely identify an identification scheme with a globally unique code. An organization (or if needed, its organization parts) may be uniquely identified, possibly by one or more identification schemes with the structure identified in this clause.

The structure for the identification of organizations and organization parts shall consist of the following four components:

a) the International Code Designator (ICD), specified in [4.2](#);

b) the organization identifier (OI) within an identification scheme, specified in [4.3](#);

c) an optional organization part identifier (OPI), specified in [4.4](#);

d) an optional OPI source indicator (OPIS), specified in [4.5](#).

No particular sequence of the four components is specified in this document.

Examples of use of the structure are given in informative [Annex B](#).

4.2 International Code Designator (ICD)

The International Code Designator (ICD) is used to uniquely identify an organization identification scheme according with the following requirements.

a) The ICD values shall be integers from 1 to 9999. The ICD may be transmitted as a variable-length data element; conversely, if transmitted in a 4 digit fixed length field, leading zeros shall be added to complete the format to 4 digits if the ICD value is less than 1000.

b) An International Code Designator value shall be allocated to an organization identification scheme in accordance with the procedure specified in ISO/IEC 6523-2.

c) The ICD value allocated to an organization identification scheme shall be unique.

d) To guarantee unique identification of organization identification schemes, an ICD value once assigned shall not be reallocated.

ICD values reserved for special use are specified in Clause 5.

ICD format shall be as specified in Annex A.

4.3 Identification of an organization within an identification scheme (OI)

An organization shall be identified within an identification scheme by the identifier allocated to it within that scheme, the Organization Identifier (OI). The identification scheme is identified by the ICD value.

The following requirements apply for the OI values allocated to an organization within an identification scheme.

a) It shall be possible to express the OI value by a sequence of characters with ISO/IEC 10646 UTF-8 encoding and with a length of maximum 255 octets.

b) The OI value shall be a single line field unique within the identification scheme, and the acceptable characters shall be, as per ISO/IEC 10646 classification, graphic characters and space characters.

c) Without prejudice to items "a" and "b", the format of the OI, including the actual number of characters and character repertoire used, shall comply with the identification scheme as documented upon registration, in accordance with ISO/IEC 6523-2.

4.4 Identification of an organization part (OPI)

4.4.1 Purpose and usage

The purpose of the identification of an organization part is to facilitate, through an Organization Part Identifier (OPI), the reference to any department, service or other entity within an organization, which needs to be identified for information interchange.

Organization part identifiers may be allocated:

a) either by the scheme identifying the organization (in addition to the identifier of the organization itself); or

b) by another method, specified at the initiative of the organization or by agreement between the interchange partners.

NOTE 1   In case "b", the identifier can be, for example, created by the organization, or chosen by it using an external source of identifiers other than the one used for the identification of the organization.

NOTE 2   A combination of approaches "a" and "b" can also be used, for example if the organization part identifier used is an identifier created by the scheme identifying the organization, completed by a sub-identifier coming from another source.

When the identification of organization parts is done by the organizations themselves, and except if otherwise specified by the rules governing the identification scheme:

— some organizations may choose to allocate identifiers to parts of themselves, other may choose not to do so;

— changes in the list of parts identified by the organization, and to the identifiers allocated to them, are managed by the organization itself, at its own initiative.