# SLOVENSKI PREDSTANDARD

# oSIST ISO 8459-4:2005

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Information and documentation - Bibliographic data element directory - Part 4: Circulation applications

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# INTERNATIONAL STANDARD

**ISO**
**8459-4**

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# Information and documentation — Bibliographic data element directory —

## Part 4:
## Circulation applications

*Information et documentation — Répertoire des éléments de données bibliographiques —*

*Partie 4: Applications à la circulation*

# Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 8459-4 was prepared by Technical Committee ISO/TC 46, *Information and documentation*, Subcommittee SC 4, *Computer applications in information and documentation*.

ISO 8459 consists of the following parts, under the general title *Information and documentation — Bibliographic data element directory*:

— *Part 1: Interloan applications*

— *Part 2: Acquisitions applications*

— *Part 3: Information retrieval applications*

— *Part 4: Circulation applications*

Annex A forms an integral part of this part of ISO 8459. Annexes B and C are for information only.

# Introduction

Data are interchanged for the purpose of starting or supporting a process. In order to transmit information required to support a process, the various elements of data in the interchanged messages must be fully understandable to the processes concerned. This part of ISO 8459 describes, in the form of a directory, data elements used to support circulation processes.

The data elements that may occur in a circulation transaction are presented in four ways:

a)  A data element directory (see clause 4) with annexes containing code values and description for messages (see A.1) and date/time qualifier (see A.2).

b)  An index (see clause 5) consisting of names, keywords and synonyms for data elements and data element values including names assigned to messages.

c)  A structured order of data elements (see clause 6) which relates similar data elements in a hierarchical fashion.

d)  A matrix (see clause 7) showing the data elements pertaining to specific circulation messages.

This part of ISO 8459 is the fourth part in a series which will, when complete, comprise a comprehensive data element directory for bibliographic use. This part of ISO 8459 is primarily intended for new circulation systems, for the exchange of circulation messages between different systems and for the exchange of data between client and server in the client/server model.

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# Information and documentation — Bibliographic data element directory —

## Part 4:
Circulation applications

## 1 Scope

This part of ISO 8459 specifies and describes data elements required in the interchange of data between circulation systems (i.e. terminal to computer or computer to computer). It also identifies messages and their data elements which are used in circulation systems.

It is intended to support both batch and interactive circulation transactions.

Annex B provides examples of how this part of ISO 8459 may be used.

The structuring of the data elements into messages falls outside the scope of this part of ISO 8459.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 8459. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 8459 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 639:1988, *Code for the representation of names of languages.*

ISO 2108:1992, *Information and documentation — International standard book numbering (ISBN).*

ISO 3166-1:1997, *Codes for the representation of names of countries and their subdivisions — Part 1: Country codes.*

ISO 3297:1986, *Documentation — International standard serial numbering (ISSN).*

ISO 3901:1986, *Information and documentation — International Standard Recording Code (ISRC).*

ISO 4217:1995, *Codes for the representation of currencies and funds.*

ISO 5218:1977, *Information interchange — Representation of human sexes.*

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ISO 7498-3:1989, *Information processing systems — Open Systems Interconnection — Basic Reference Model — Part 3: Naming and addressing.*

ISO 8601:1988, *Data elements and interchange formats — Information interchange — Representation of dates and times.*

ISO/IEC 10027:1990, *Information technology — Information Resource Dictionary System (IRDS) Framework.*

ISO 10957:1993, *Information and documentation — International standard music number (ISMN).*

# 3 Definitions

For the purposes of this part of ISO 8459, the following definitions apply.

**3.1 character string:** An arbitrary combination of letters, digits, punctuation marks or other symbols.

**3.2 circulation:** The work of controlling the loan and supply, user identification, status, return, recall, associated fees, bookings and reservations for items or copies thereof of the holdings of a library.

**3.3 data element:** A basic unit of identifiable and definable data. It has a data element name represented by a tag as identifier and one or more values for expressing (a) particular fact(s).

**3.4 data element directory:** A listing of data elements with specifications of representative data element values, as appropriate.

**3.5 data element group:** A set of related data elements.

**3.6 data element group name:** One or more words in a natural language identifying a data element group.

**3.7 data element name:** One or more words in a natural language identifying a data element.

**3.8 data element value:** A fact expressed by codes, digits or natural language corresponding to the data element description and representation.

**3.9 message:** A structured combination of data elements used in a circulation transaction.

**3.10 record:** A group of data usually treated as a unit.

**3.11 representation:** The way in which a particular data element value is expressed using one or more number(s), letter(s) or symbol(s).

**3.12 tag:** An identifier allocated for use in place of a data element name or data element group name. (In this part of ISO 8459, a group of three digits.)

**3.13 transaction:** The creation or modification of a message required to support the circulation of an item or to provide information concerning circulation status.