

ISO/AWI 2146

ISO TC46/SC4/WG7 N...

**ISO 2146. Information and documentation - Directories of
libraries and related organizations**

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Foreword

International Standard ISO 2146 was prepared by Technical Committee 46, *Information and documentation*.

This document is the first Working Draft of a third edition of the standard intended to cancel and replace ISO 2146 : 1988 (E), of which it will constitute a technical revision.

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 approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75% approval by the member bodies voting.

Introduction

Directory data informs many of the processes needed for information delivery in a distributed network environment.

- Users need processes to help them discover the existence of information services.
- They need to know the terms and conditions for using the service and what service levels to expect.
- They need unmediated access to the service.
- They need to customise their interface with the service provider.
- They need unmediated access to service delivery options whether delivery occurs directly over a network or through an offline process.
- They need name authority control - contextual information that links people and organizations to the roles they play over time, for example, as the creators, providers or subjects of information content or the providers of information services.

In addition, service providers need to build and maintain directories of stakeholders and to access directory information to facilitate the service delivery process, for example when they need to negotiate with another service provider to obtain a copy of an information resource on behalf of a user.

This standard provides an information model and data element list that may be applied to one or more of these scenarios. This will enable organizations in the same sector and in parallel sectors to collaborate in the development and delivery of information services and content.

Information and documentation - Directories of libraries and related organizations

1. Scope and field of application

This international standard is intended to assist in compiling directories of libraries, museums, archives, information and documentation centres and document suppliers, including a description of their collections (including databases), services and activities. The rules of this standard concern directories operating in an international distributed network environment. The standard should be used for:

- Collection of the appropriate data.
- Publishing of international directories, national directories published in bi- or multilingual countries and national directories intended for international use.
- Exchange of directory data.
- Provision of access to directory data as part of resource discovery, access management or document delivery processes.
- Archiving of directory data when the data exists only in electronic form.

2. Normative references

The following standards contain provisions that, through reference in this text, constitute provisions of ISO 2146. At the time of publication the editions indicated were valid. All standards are subject to revision, and parties to agreements based on ISO 2146 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.

[Editorial note: This is a list of the currently valid normative references from the ISO 2146:1988 edition with the addition of ISO 8459, ISO 10160-1, ISO DIS 15511 and ISO 23950. It will need to be revised by the Working Group.]

ISO 9:1995	Information and documentation -- Transliteration of Cyrillic characters into Latin characters -- Slavic and non-Slavic languages
ISO 259:1984	Documentation -- Transliteration of Hebrew characters into Latin characters
ISO 259-2:1994	Information and documentation -- Transliteration of Hebrew characters into Latin characters -- Part 2: Simplified transliteration
ISO 639:1988	Code for the representation of names of languages
ISO 639-2:1998	Codes for the representation of names of languages -- Part 2: Alpha-3 code
ISO 690:1987	Documentation -- Bibliographic references -- Content, form and structure

ISO 690-2:1997	Information and documentation -- Bibliographic references -- Part 2: Electronic documents or parts thereof
ISO 843:1997	Information and documentation -- Conversion of Greek characters into Latin characters
ISO 999:1996	Information and documentation -- Guidelines for the content, organization and presentation of indexes
ISO 1086:1991	Information and documentation -- Title leaves of books
ISO/IEC 2382-1:1993	Information technology -- Vocabulary -- Part 1: Fundamental terms
ISO 2709:1996	Information and documentation -- Format for Information Exchange
ISO 3166-1:1997	Codes for the representation of names of countries and their subdivisions -- Part 1: Country codes
ISO 3166-2:1998	Codes for the representation of names of countries and their subdivisions -- Part 2: Country subdivision code
ISO 3166-3:1999	Codes for the representation of names of countries and their subdivisions -- Part 3: Code for formerly used names of countries
ISO 4217:2001	Codes for the representation of currencies and funds
ISO 5127:2001	Information and documentation -- Vocabulary (available in English only)
ISO 8459-1:1988	Documentation -- Bibliographic data element directory -- Part 1: Interloan applications
ISO 8459-2:1992	Information and documentation -- Bibliographic data element directory -- Part 2: Acquisitions applications
ISO 8459-3:1994	Information and documentation -- Bibliographic data element directory -- Part 3: Information retrieval applications
ISO 8459-4:1998	Information and documentation -- Bibliographic data element directory -- Part 4: Circulation applications
ISO 8459-5: 2000	Information and documentation. Bibliographic data element directory. Part 5. Data elements for the exchange of cataloguing and metadata.
ISO 10160:1997	Information and documentation -- Open Systems Interconnection - - Interlibrary Loan Application Service Definition (available in English only)
ISO 10161-1:1997	Information and documentation -- Open Systems Interconnection - - Interlibrary Loan Application Protocol Specification -- Part 1: Protocol specification (available in English only)
ISO 10161-2:1997	Information and documentation -- Open Systems Interconnection - - Interlibrary Loan Application Protocol Specification -- Part 2: Protocol implementation conformance statement (PICS) proforma (available in English only)
ISO DIS 15511 1999	Information and documentation – International Standard Identifier for Libraries and Related Organizations (ISIL)

ISO 23950 Information and documentation – Information retrieval (Z39.50)
application definition and protocol specification

3. Definitions

For the purposes of this international standard the following definitions apply.

[Editorial note: This is a list of mappings that accompanied ISO 2146 revised data model, Working draft 1, 4 April 200 (TC46/SC4/WG7/N168). Concepts like Collection and Service are defined within the Information Model and not separately defined here and this will need to be made clear here. ISO 2146 : 1988 has definitions of data element, data element group, data element set, data item and tag in this section. These terms will need to be revised and extended to reflect the use of information modeling concepts in the new edition.]

Collection	Collection if the data element deals with the collection; Organization (Whole organization or Organizational unit) if the data element deals with the organization managing the collection; Service if the data element deals with the service providing access to the collection.
Service	Organization (Whole organization or Organizational unit) if the data element deals with the organization managing the service; Service if the data element deals with service delivery.
Branch	Organizational unit
Department	Organizational unit
Division	Organizational unit
Sub-division	Organizational unit
Data base	Collection if the data element deals with the data base; Organization (Whole organization or Organizational unit) if the data element deals with the organization managing the data base; Service if the data element deals with the service providing access to the data base
Data bank	Collection if the data element deals with the data bank; Organization (Whole organization or Organizational unit) if the data element deals with the organization managing the data bank; Service if the data element deals with the service providing access to the data bank
Project	Event if the data element deals with the project; .Organization (Whole organization or Organizational unit) if the data element deals with the organization managing the project.

4. Application

The data element list in this international standard is the point of departure for recording, printing and exchange of data which describe libraries and related organizations. The data elements are systematically ordered, the hierarchy being defined in the Information Model.

The Information Model objects shall indicate to the user which data needs to be collected, recorded and made available through print or machine-readable copies in order to construct a directory. A matrix showing the essential Information Model objects for different types of directories is given in Section 10. For each object, the essential data elements are indicated in the Information Model.

[Editorial note: This section will be developed to categorize the different types of directories that use the standard and to identify usage scenarios specific to each category. The following fields of application will also be addressed:

- (a) *Data collection*
- (b) *Data recording*
- (c) *Directory publication (print and online)*
- (d) *Data exchange*
- (e) *Access protocols*
- (f) *Data archiving*
- (g) *Collection of the appropriate data.]*

5. Maintenance

[Editorial note: This will be a statement about the requirement for a Maintenance Agency (MA) as stated in Annex G1 to the ISO Directives and how this will be met.]

6. Organization

[Editorial note: This will be a brief outline of the organization of the rest of the standard].

7. Information model

[Editorial note: This will contain a list of all objects defined in the Information Model, their relationship to each other and their properties. The content will be based on two documents:

- ISO 2146 revised data model, *Working draft 1, 4 April 200 (TC46/SC4/WG7/N168)*.
- *Interlibrary Loan Protocol Implementors Group (IPIG). Directory Services for Interlibrary Loan. Online. Available from: <http://www.nlc-bnc.ca/iso/ill/ipd.htm> (20 May 2002).*

Either a tabular format will be adopted, following the format of the current draft of the IPIG document or an abstract description format as used in standards such as the NISO Circulation Interchange Protocol (NCIP) (ANSI/NISO Z39.83-200x).

N168 will be substantially revised to convert the current representation from an entity-relationship model to an object-oriented model, in line with the IPIG work. In addition it will be extended to accommodate mappings to the following data element lists:

- *Collection Level Description*

- *Z39.50 Explain*
- *INDECS*
- *MARC21 format for community information*
- *UNIMARC*
- *AACR2*
- *ISAAR(CPF)*
- *Encoded Archival Context*
- *Other standards to be identified.*

The IPIG document is substantially completed and will form a subset of the total information model for specific application to resource sharing directories.

A typical entry if the tabular format is chosen will take the form:

SymbolCode

No	Name	Req	Mult	Type
4.	SymbolCode			
4.1	Authority	M	1	String - Enumeration – Authority Code
4.2	OrganizationCode	M	1	String
4.3	AuthorityType	M	1	String – Enumeration – AuthorityTypeCode
4.4	AliasActiveStatus	M	1	Boolean
4.5	DefaultProcessingUnit	M	1	Boolean

A typical entry if the abstract description format is chosen will take the form:

SymbolCode

Information about naming authority symbols that are associated with the Organization.

Required data: Authority
 OrganizationCode
 AuthorityType
 AliasActiveStatus
 DefaultProcessingUnit

Optional data: none

(Repeatable elements would be qualified by (R). Type information would be included in the separate Data Element List).

8. Data types

[Editorial note: This section will contain text defining data types using the content developed for the IPIG Directory.]

9. Data element list

[Editorial note: This section will contain a list of all data elements, in alphabetic order, that are defined in the Information Model. It will act as an index to the Information Model and also contain full definitions of each data element. As with the Information Model content will be derived from and extend:

- ISO 2146 revised data model, Working draft 1, 4 April 200 (TC46/SC4/WG7/N168).
- Interlibrary Loan Protocol Implementors Group (IPIG). Directory Services for Interlibrary. Online. Available from: <http://www.nlc-bnc.ca/iso/ill/ipd.htm> (20 May 2002).]

A typical entry will take the form:

Authority	String; of Enumeration AuthorityCode. Identifies the naming authority symbol which applies to the OrganizationCode .
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<snip>

AuthorityType	String; of Enumeration AuthorityTypeCode. Identifies the usage of the naming authority Symbol.
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<snip>

SymbolCode	Information about naming authority symbols that are associated with the Organization.
Authority	
AuthorityType	
AliasActiveStatus	
DefaultProcessingUnit	
OrganizationCode	

10. Essential objects for the main types of directories

[Editorial note: This section will map objects defined in the Information Model to the main types of directories.]

11. Enumerated lists

[Editorial note: This section will list the enumerated lists identified in the standard and discuss their maintenance, which will occur outside the standard.]

12. Record schemas and syntaxes

[Editorial note: This section will discuss use of XML, X.500 and LDAP schemas for data interchange and protocol access to directory data.]

13. Presentation of published and archived directories

[Editorial note: This section will discuss standards in relation to the publication and archiving of directories in print and electronic form.]