
**Information and documentation —
Bibliographic data element directory —**

Part 5:
**Data elements for the exchange of
cataloguing and metadata**

iTeh STANDARD PREVIEW

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

*Partie 5: Éléments de données pour l'échange de catalogues et de
métadonnées*

<https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0ac7e79addb3/iso-8459-5-2002>



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 8459-5:2002

<https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0ac7e79addb3/iso-8459-5-2002>

© ISO 2002

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Contents

	Page
Foreword.....	iv
Introduction.....	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Directory	3
5 Index.....	34
6 Structured order of data elements.....	47
7 Cataloguing application message matrix.....	54
Annex A (normative) Selected data element values.....	61
Annex B (informative) Examples of how this part of ISO 8459 may be used.....	66
Annex C (informative) Relationship of the five parts of ISO 8459.....	68
Bibliography.....	72

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 8459-5:2002](https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0ac7e79addb3/iso-8459-5-2002)

<https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0ac7e79addb3/iso-8459-5-2002>

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this part of ISO 8459 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 8459-5 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*

— *Part 5: Data elements for the exchange of cataloguing and metadata*

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

ITeH STANDARD PREVIEW
(standards.iteh.ai)

[ISO 8459-5:2002](https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0ac7e79addb3/iso-8459-5-2002)

<https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0ac7e79addb3/iso-8459-5-2002>

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 for the processes concerned. This part of ISO 8459 describes, in the form of a directory, data elements used to support cataloguing.

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

- a) a data element directory (see clause 4), and code values and description for messages (see A.2) and date/time qualifier (see A.3);
- b) an index (see clause 5) consisting of names, keywords and synonyms for data elements, and data element values, including names assigned to messages (see annex A);
- 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 cataloguing messages.

This part of ISO 8459 is the fifth part of a series which comprises a comprehensive data element directory for bibliographic use. This part of ISO 8459 is primarily intended for new cataloguing systems, for the exchange of cataloguing messages between different systems and for the exchange of data between client and server in the client/server model.

[ISO 8459-5:2002](https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0ac7e79addb3/iso-8459-5-2002)

<https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0ac7e79addb3/iso-8459-5-2002>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 8459-5:2002

<https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0ac7e79addb3/iso-8459-5-2002>

Information and documentation — Bibliographic data element directory —

Part 5: Data elements for the exchange of cataloguing and metadata

1 Scope

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

It is intended to support both batch and interactive cataloguing 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.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

2 Normative references

ISO 8459-5:2002

<https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0a9c52003b0c/iso-8459-5-2002>

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 8459. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 8459 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 639-2:1988, *Codes for the representation of names and languages — Part 2: Alpha-3 code*

ISO 2709:1996, *Information and documentation — Format for information interchange*

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

ISO/IEC 7498-3:1997, *Information processing systems — Open Systems Interconnection — Basic Reference Model: Naming and addressing*

ISO 8601:2000, *Data elements and interchange formats — Information interchange — Representation of dates and times*

ISO 10324:1997, *Information and documentation — Holdings statements — Summary level*

ISO 23950:1998, *Information and documentation — Information retrieval (Z39.50) — Application service definition and protocol specification*

UCP, *Union Catalogue Profile. International Registered Profile (to be used with ISO 23950)*
<http://www.nla.gov.au/UCP>

3 Terms and definitions

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

3.1

authority record

record in a cataloguing system that describes, analyses and controls a standardized form of a name, subject, series or other heading

3.2

bibliographic item

unit or set of units in any physical form, either serial or non-serial, that are published, issued or treated as an entity or work, and form the basis for a single bibliographic description

3.3

bibliographic record

record in a cataloguing system that describes, analyses and controls a bibliographic item

3.4

character string

arbitrary combination of letters, digits, punctuation marks or other symbols

3.5

catalogue record

record in a cataloguing system that describes, analyses and controls bibliographic or authority data or holdings

3.6

cataloguing

process of compiling a record for inclusion in one or more catalogues or indexes, that describes an entity and assists in its retrieval

iteh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 8459-5:2002](https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0ac7e79addb3/iso-8459-5-2002)

<https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0ac7e79addb3/iso-8459-5-2002>

3.7

copy

physical representation or piece of a bibliographic item

3.8

data element

basic unit of identifiable and definable data which has a data element name represented by a tag as identifier and one or more values for expressing (a) particular fact(s)

3.9

data element directory

listing of data elements with specifications of representative data element values, as appropriate

3.10

data element group

set of related data elements

3.11

data element group name

one or more words in a natural language identifying a data element group

3.12

data element name

one or more words in a natural language identifying a data element

3.13

data element value

fact expressed by codes, digits or natural language corresponding to the data element description and representation

3.14**holdings record**

record in a cataloguing system that describes, analyses and controls holdings associated with a bibliographic record

3.15**holdings statement**

record of the locations of a specific bibliographic item and, optionally, the units of that item held at a location

3.16**message**

structured combination of data elements used in a transaction

3.17**metadata**

data that are included in an entity or linked to an entity that describe the entity and assist in its retrieval

3.18**record**

group of data usually treated as a unit

3.19**representation**

way in which a particular data element value is expressed using one or more number(s), letter(s) or symbol(s)

3.20**serial issue**

unit of a bibliographic item that is issued in successive parts at regular or irregular intervals and intended to be continued indefinitely

3.21**tag**

identifier allocated for use in place of a data element name or data element group name

NOTE

In this part of ISO 8459, a group of four digits.

3.22**transaction**

creation or modification of a message required to support the cataloguing of an item or a bibliographic holdings item

4 Directory

The directory names and defines data elements and data element groups used to support cataloguing transactions. The information pertaining to each data element or data element group is presented in four separate columns, labelled tag, name, description and representation and remarks. A "tag" is used to identify a data element as well as a data element group. "Name" contains data element names and data element group names. Data element group names are printed in bold letters to distinguish them from data element names. "Description" includes a definition for each data element or data element group followed by a list of corresponding tags and data elements that comprise the group. "Representation and remarks" includes explanatory text about conventions and/or standards used to represent values applicable to a data element or a data element group as well as sample values, if applicable.

iTeh STANDARD PREVIEW

(standards.iteh.ai)

ISO 8459-5:2002

[https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-](https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0ac7e79addb3/iso-8459-5-2002)

[0ac7e79addb3/iso-8459-5-2002](https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0ac7e79addb3/iso-8459-5-2002)

Tag	Name	Description	Representation and remarks
0001	Message identification	Data used to identify a particular message. Group identifier for data elements 0002-0004.	
0002	Message name	Phrase or code identifying the function of a message.	See A.2
0003	Date	Year, month and day on which a transaction is performed, a message is sent or an event occurs.	Also used in conjunction with date/time qualifier (9005). See A.3 for the various qualifiers that can be specified. See ISO 8601.
0004	Time stamp	Time at which a transaction is sent, a message is sent or received or an event occurs.	Used by automated systems to indicate the precise hour, minute and second, and part of a second that a transaction occurred. Used in conjunction with A.3. See ISO 8601.
0010	Transaction number	Code or number assigned to a document or message exchanged in a transaction.	This number is assigned by the institution responsible for creating the specific type of document or message (e.g. record insert, item replacement etc.).
0011	Transaction completion flag	Code to indicate whether or not a transaction has been successful or not.	Possible values: 0 = unsuccessful 1 = successful
0020	Additional transaction information group	Group of data elements that may accompany a transaction to provide additional information. Group identifier for data elements 0021-0022.	
0021	Additional transaction information	Code or phrase identifying the nature of the contents of additional transaction information.	Examples: sent by target: — information unrelated to a transaction such as system availability; — security restriction instruction. sent by origin: — review instruction.
0022	Instruction override	Code, defined internally by a system, indicating the actions that may follow from a particular message or message part.	Used in conjunction with additional transaction information (0021) and with transaction error condition (0025). Possible values: 0 = override possible 1 = override possible with password 2 = override possible with security clearance 3 = override not possible 4 = affirmation not required; information only

iTech STANDARD PREVIEW
(standardsite.com)
ISO 8459-5:2002
<https://standardsite.com/catalog/standards/sist/c2c833f2-d0da-44eb-8859-dac7e341d13/iso-8459-5-2002>

Tag	Name	Description	Representation and remarks
0025	Transaction error condition	Code or standardized phrase sent by a system to indicate the nature of an error condition in relation to a transaction request.	Related to help topic (9010) but often more specific than it, pinpointing brief and precise errors rather than textual explanation and outlines of procedures. May be used in conjunction with an instruction override (0022).
1000	Session details	Data that identify various details about a specific session. Group identifier for data elements 1000-1024, 1030, 1150, 1200-1214, 1250-1254.	
1010	Transaction participant	Data that identify an institution which participates in a transaction. Group identifier for 1011-1014, 1030.	
1011	Participant's function	Word or code specifying the function or role performed by a party to a session.	Possible values: 0 = service provider 1 = database provider 2 = intermediary, gateway server 3 = operator
1012	Password	Code used by a system to authenticate the identity of an individual or automated process that has requested or is using a system function or service.	This code may be revised periodically to preserve its security. A password is typically supplied by the user at session initiation time but it could also be requested at any time during a session.
1013	Password edition	Code or phrase used to identify the current and previous password or passwords.	This data element is used in conjunction with an institution identifier (1036) and telenetwork user identifier (1074).
1014	Password type	Code or phrase used to indicate the specific services allowed to the password holder.	This data element is used by systems to support multiple levels of authentication. Possible values: 0 = system connection 1 = database connection 2 = read access 3 = write access 4 = delete privileges 5 = output instructions Security level (1254) is used to control access to classified information. Related to access privileges (1250), which provides various details associated with a type of privilege. 1014 states the type of privilege.

Tag	Name	Description	Representation and remarks
1015	Session identifier	Code or number used to identify a specific period of interaction between a user and an automated system.	A session typically covers all transactions between the user and system from log-on to log-off. Sessions may be aborted prematurely by unusual systems or telecommunications events to produce an artificial log-off point. Sophisticated systems allow sessions to be suspended and resumed later or to change applications during a particular session.
1016	Subsession identifier	Code or number used to identify a period of interaction with one specific service provided within a single session on an automated system.	
1017	Reference identifier	Code or number assigned to an intersystem communication.	This number is used to monitor and verify that all system interactions have been transferred and processed in the proper sequence.
1018	Continue flag	Instruction that processing should continue even though resource constraints (1020, 1021, 1251) have been exceeded.	Possible values: 0 = continue 1 = stop
1019	Suspend flag	Indication whether processing has been suspended whenever resource constraints (1020, 1021, 1251) have been exceeded.	Possible values: 0 = processing not suspended 1 = processing suspended
1020	Cost constraint	Predefined monetary value which, if exceeded, will result in a specific system action.	Cost constraints are frequently used to limit the system resources that may be consumed by any one user over a given period of time.
1021	Session length constraint	Predefined time limit which, if exceeded, will result in a predefined system action.	A system will typically terminate a session after a set amount of time of system usage or inactivity.
1022	Resource usage type	Numeric value used to indicate the type of system resource that has been used within a session or given time period.	Systems typically maintain information on the following resources in order to support planning, monitoring and controlling of these resources. Possible values: 0 = CPU time 1 = connect type 4 = number of sessions 7 = packets transmitted 8 = memory 9 = terminal transactions 10 = number of disk accesses 11 = number of tapes Used in conjunction with amount of usage (1024).

IT IS A STANDARD PREVIEW
 (standards.iteh.ai)
 ISO 8459-5:2002
<https://standards.iteh.ai/catalog/standards/sist/c2c833f2-d0da-44eb-8859-0ac7e79addb3/iso-8459-5-2002>

Tag	Name	Description	Representation and remarks
1023	System performance	Data collected to inform management about system performance.	Possible values: 0 = start-up delay 1 = percentage of downtime 2 = number of system malfunctions 3 = number of telecommunication interruptions 4 = average response time Used in conjunction with amount of usage (1024).
1024	Amount of usage	Figure that measures the values established under resource usage type (1022) and system performance (1023).	
1030	Institution identification	Group of data elements or code intended to identify an institution participating in a session or transaction. Group identifier for data elements 1031-1037, 1050-1063, 1070-1075.	
1031	Name of institution	Word, or phrase or initialism intended to identify an institution or corporation. Group identifier for data elements 1032 to 1034.	
1032	Main unit of institution name	Base name of an institution, usually the name of the governing body.	
1033	Subordinate unit of institution name	Part of a name of an institution that defines a subdivision or department or unit of the institution.	This data element may be repeated to define subordinates of subordinates.
1034	Abbreviated name	Short form of an institution's name (1031).	
1035	Institution identifier code	Code used to identify the numbering system contained in the institution identifier.	Example: ISIL (ISO 15511)
1036	Institution identifier	Unique number or code used to identify an institution.	
1037	Official seal of institution	Design, initial or other device serving to identify an institution in an official manner.	

Tag	Name	Description	Representation and remarks
1050	Address	Code or phrase that gives the geographic location or place associated with an institution. Group identifier for data elements 1051-1063, 1070-1075.	This element may be used in conjunction with institution identification (1030). For telenetwork addresses see 1070.
1051	Address instruction	Word or code that indicates the type of message or mail that is sent to the address where there are multiple addresses associated with an institution or individual.	This data element is used in conjunction with address (1050). Possible values: 0 = ship to 1 = bill to
1052	Address type	Code, word or phrase that defines the nature of a particular address where there are multiple addresses associated with an institution.	Possible values: 0 = temporary address 1 = permanent address 4 = other
1053	Delivery service	Code, word or phrase that indicates the mail service that will deliver to an address.	Possible values: 0 = national mail service 1 = campus mail 2 = internal courier 3 = other
1054	Current address flag	Code, word or phrase that indicates which address of a series of addresses associated with an institution, is valid.	Where all types of messages and mail are sent to only one address, this data element is used to indicate the current address from possible multiple addresses. Where different types of messages and mail are sent to different addresses, then the address instruction data element (1051) is used instead of this element. Possible values: 0 = current 1 = not current 2 = unknown
1055	Post office box	Box number assigned by the postal authority.	
1056	Location within building	Code, number and/or phrase used to identify a location within a building or building complex	Used when a second sequence of numbering in addition to a street name and number (data elements 1057 and 1058) are needed to identify a particular location. Examples: Suite 42 Level 4 Reserve reading room Children's library

Tag	Name	Description	Representation and remarks
1057	Street name	Phrase used to identify route within a city, rural or local area, including street, road, boulevard, avenue, etc.	
1058	Street number	Number and/or phrase used to identify a location of a building within a route.	This data element can be used to include the names of buildings. It is used in conjunction with the data element location within building (1056) and street name (1057). The data elements may be combined into one address line.
1059	City	Word or phrase used to identify a city, including suburb or postal area.	
1060	Locality	Word or phrase identifying a subentity within a country.	Includes county, parish, etc.
1061	Region	Word or phrase identifying an area within a country.	Includes state, province, department and prefecture.
1062	Country	Word or phrase used to identify a country.	For country codes consult ISO 3166-1.
1063	Postal code	Code assigned by the postal authorities of a country that uniquely identifies an address or group of addresses.	
1064	Telecommunication carrier	Code, word, phrase or initialism used to identify the telecommunications carrier facilities being used to access a remote system.	It may be necessary to identify more than one carrier. The name of the carrier may also imply the switching technology that is being used (i.e. packet-switched or circuit-switched).
1070	Telenetwork address	Unique number or code used to identify a device within a communications network. Group identifier for data elements 1071-1075.	
1071	Telephone number	Unique number assigned to a telephone line.	
1072	Telefacsimile number	Telecommunications number used for sending and receiving telefacsimiles.	
1073	Electronic mail identifier	Unique number assigned to an electronic mail box or service connection.	
1074	Telenetwork user identifier	Unique code assigned to a user in a communication network.	This data element may or may not be the same value as institution identifier (1036).